EUROPE'S BUSINESS NEWSPAPER

FINANCIAL TIMES

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VIETNAM
War economy gives way to reform
Page 22

World News

E German mine blast triggers earthquake

Mine blasting in East Germany started an earthquake sending shock waves as far as France and Austria. The shock was triggered by a huge underground subsidence which registered up to 5.9 on the Richter scale.

People were hurt by falling chimneys close to the centre of the blast at a potash mine at Merkers, across the border from West Germany's Bad Hersfeld region. Power supplies were cut by rock slides.

Bush wage test
President George Bush, fresh from his defeat over the Tower affair, faces a new political test of strength with the Democrat-controlled Congress over rival plans for raising the minimum wage. Page 2

Boat-people curbs
Member states of the Associations of South-East Asian Nations announced that from today, all Vietnamese boat-people arriving in the region would no longer be eligible for automatic resettlement. Page 22

Kohl vote setback
Helmut Kohl, West German Chancellor, admitted that his Christian Democratic Union (CDU), dominant party in the centre-Right coalition, was in a "serious situation" following the conservatives' election setback in Hesse. Page 22

North trial claim
Oliver North rewrote old memos on fund-raising and military aid for the Nicaraguan Contras after two congressional committees inquired into his activities, Robert McFarlane, former national security adviser, testified.

Karachi ethnic riot
Masked gunmen pulled people out of buses and shot at them as the death toll from four days of ethnic rioting in Karachi, Pakistan, rose to 10.

Polish debt plea
Bronislaw Geremek, a Solidarity leader, urged the West to reward Poland's move towards reform by easing the country's debt burden. Page 3

F-16 deal threat
Opposition in US Congress and the Bush Administration is threatening a US-Japanese agreement to co-develop and co-produce the advanced version of the F-16 fighter, known as the FSX. Page 5

Air crash report
An official report into a fire that killed 55 people on an aircraft at Manchester airport in northern England in 1985 recommended that airlines provide smoke hoods for passengers and consider installing cabin sprinklers. Page 11

UK Beirut move
Britain said it was closing its consular and visa sections in West Beirut and repeated a call for Britons to leave the country because of the Salman Rushdie affair. Page 6

Unita denies claim
Angola's rebel Unita movement denied allegations that senior members of the movement had been tortured or killed. Page 6

Afghans flee
Thousands of Afghan refugees are fleeing to Pakistan to escape fighting around the eastern Afghan city of Jalalabad, mujahideen rebels said.

Business Summary

UK equities rise above uncertainty over budget

A record rise in UK retail sales last month highlighted the uncertain economic backdrop to the sixth Budget of Mr Nigel Lawson, the UK Chancellor, due to be delivered later today. But the unexpectedly steep increase failed to dampen confidence that the Budget will buttress the Government's battle against inflation. Share prices closed at the highest level since the October 1987 stockmarket crash and the FT-SE 100 share index closed 17.8 points higher at 2,103.0, breaching the psychological 2,100 barrier. Page 11

NICKEL prices came under further pressure yesterday following the announcement of an unexpected 222-tonne rise in London Metal Exchange warehouse stocks. The cash position, which had fallen by $1,375 last week, closed $650 down at $17,000 a tonne. Commodities, Page 34

Nickel
Cash metal ($ per tonne)

HENKEL, West German's fourth biggest chemicals company, announced proposed $480m cash purchase of the industrial-materials division of Quantum, big US chemicals producer. Page 23

GERALD Ronson's Heron International group has struck a deal to sell its UK motor insurance subsidiary, National Insurance and Guarantee Corporation (NIG), to Sweden's Skandia International for an undisclosed sum thought by observers to be at least £150m ($257.9m). Page 23

RENAULT Vehicules Industriels (RVI), large truck manufacturing subsidiary of French state-owned Renault group, reported a sharp rise in consolidated group profits last year to FFr1.2bn ($190m) from just FFr182m in 1987. Page 23

VENEZUELA replaced its long-standing dual exchange rate with a single floating rate in what amounted to a big devaluation of the bolivar. Page 22

AETNA LIFE & Casualty, largest investor-owned insurance enterprise in the US, is to sell its Federated Investors subsidiary to the unit's management for $345m. Page 26

IRISH Futures and Options Exchange (IFOX) is to start a dummy run on Wednesday and go live in mid-April with trading beginning in three futures contracts. Page 29

ROB CAMPBELL, outspoken critic of the government's handling of the sale of Bank of New Zealand, has been dismissed as a director of the bank, while the government is poised to announce its plans for BNZ in a statement due today. Page 27

CREDIT du Nord, commercial banking subsidiary of France's Paribas group, returned to profit last year after FFr600m ($95.98m) of losses in the two previous years. Page 24

SUN HUNG KAI and Co, Hong Kong financial services group which runs one of the territory's biggest brokerages, reported net profits of HK$120.8m ($15.5m) for 1988, down from HK$145.8m, reflecting a year of quieter activity on stock and futures markets. Page 27

De Klerk wins support in challenge to defiant Botha

By Anthony Robinson in Johannesburg

SOUTH AFRICA'S ruling national party last night threw its weight behind the bid by Mr F. W. de Klerk, the recently elected party leader, to take over the extensive powers currently wielded by President P. W. Botha.

A hastily convened meeting of the party parliamentary caucus unanimously accepted a recommendation by the party's top advisory body, the Federal Council that "it is in the best interests of the country and the National Party that its leader should fill the office of state president."

Both bodies were convened by Mr de Klerk less than 24 hours after President Botha appealed directly for support from the white electorate in a televised interview on Sunday night. The interview underlined his determination to stay on as state president for at least another year by rejecting the idea of early general elections which would have been automatically followed by new presidential elections.

It angered party leaders who had been seeking a compromise but were forced into responding with last night's virtual ultimatum to Mr Botha to relinquish his presidential powers to Mr de Klerk.

The 34-man Federal council, which includes seven leading party figures from each of the four provinces, is the party's highest advisory body. Its views have never been rejected by the party during the nearly 41 years of uninterrupted National Party rule.

Its members emerged from a more than three-hour session in Cape Town with a strong majority in support of Mr de Klerk to take over the powers currently wielded by Mr Botha as state president. Mr Botha, who was elected state president in 1984 by a National Party-dominated electoral college, combined the roles of head of party, state and government until shortly after his "mild stroke" in mid-January.

On February 2 he gave up the party leadership in what is now perceived as a bitterly regretted decision which led to the election of Mr de Klerk as party leader.

Since then Mr de Klerk's efforts to consolidate his position have been strongly resisted by Mr Botha, whose attempt to retain key powers like the right to elect cabinet members and call elections has now been challenged by the two top party organs.

In a joint statement after last nights meetings, the caucus and the Federal Council adopted a resolution which expressed full support for Mr de Klerk as leader of the National Party and offered him its full and wholehearted support in the handling of the interests of the NP in its future activities.

In a conciliatory gesture towards Mr Botha, however, the Federal Council said that the transfer of presidential powers to Mr de klerk should "with appreciation of the posi-

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Mexico points to need for rapid action on Brady debt relief plan

By Lucy Conger in Mexico City

MR PEDRO ASPE, the Mexican Finance Minister, yesterday began a fresh round of discussions with US officials on requests for up to $7bn in financial assistance for this year.

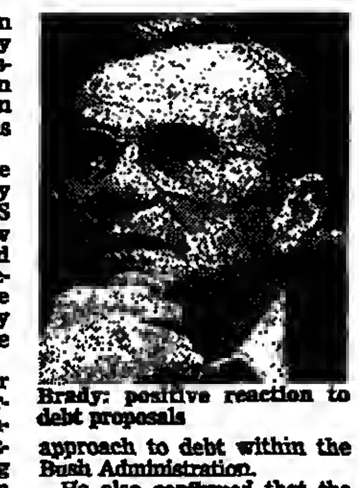
The Mexican talks follow the announcement on Friday by Mr Nicholas Brady, the US Treasury Secretary, of new proposals to reduce Third World debt. Mexico and Venezuela are expected to be the first beneficiaries of the Brady proposals, which centre for the first time on debt reduction.

The message brought by Mr Aspe is understood to underline the need for a rapid fleshing out of the Bush Administration's approach to reducing Latin America's $450bn foreign debt.

The Mexicans are concerned that unless a new debt package begins to take shape within the next month, the country risks a damaging run on reserves which in turn would complicate any deal. Mr Aspe came away from an earlier round of discussions held from February 6-9 in Washington disappointed by the lack of progress.

Foreign exchange reserves have sunk to very low levels, estimated variously at between $4bn and $5.5bn – enough to sustain current high levels of imports for three months or less. Mexico's current account deficit was $3bn last year, and is projected to reach between $5bn and $8bn this year.

In Washington yesterday, Mr Donald Mulford, the Under-Secretary designate at the Treasury, said he expected the Brady proposals to be in place within months and played down talk of differences on the



Brady: positive reaction to debt proposals

approach to debt within the Bush Administration.

He also confirmed that the cases of Mexico and Venezuela would probably treated as a priority. Riots in Venezuela two weeks ago, provoked by price rises under an International Monetary Fund adjustment programme, have given a new urgency to measures aimed at coping with the 6½-year-old Latin American debt crisis. Venezuelan negotiators are also expected to begin talks in New York with commercial banks.

The Mexican Finance Ministry welcomed the Brady plan at the weekend as "positive" for its "change in emphasis that gives priority to reduction of the debt and (debt) service," demands advanced by Mexico since December. Outside the government, Mexican analysts agreed that an immediate result of the sketchy Brady plan would be to avert the danger of a suspension of payment on Mexico's $101bn foreign debt.

Although details of how the Brady plan would benefit Mexico are unclear, "the Mexican Government will dress the plan up to maintain confidence," said Dr Rogelio Ramirez de la O, a leading economic analyst.

The press in Mexico has begun to raise the possibility of a declaration of a debt moratorium against commercial banks that resist the Brady plan. President Carlos Salinas de Gortari has consistently said that a moratorium would be a "consequence" of failed debt negotiations.

President Salinas has argued that future growth in the recessionary economy is predicated on an early solution to the foreign debt problem. Business leaders have agreed to absorb cost increases and maintain retail prices based on the government's promises that debt relief and fresh credit would take effect by July 1989, and that economic recovery would begin next year.

Stephen Fidler writes: Reactions from the Group of Seven leading industrialised countries to the Brady proposals has been largely positive.

Mr Philippe Maystadt, Belgian Finance Minister, said EC finance ministers discussed the initiative and planned to issue a statement welcoming it.

Mr Hans Tietmeyer, West Germany's state secretary for finance, was quoted by Reuters newsagency as saying Mr Brady's proposals had resulted from discussions between leading Western industrialised countries since the last IMF and World Bank meetings in September.

Congress backs Brady, Page 2

EC states vow to crack down on subsidies fraud

By Tim Dickson in Brussels

THE 12 member states of the European Community yesterday pledged themselves in Brussels to a major crackdown on all types of EC-related fraud.

But in a move calculated to dampen down some of the higher expectations raised in recent weeks, Mr Peter Schmidhuber, the EC's Commissioner in charge of budgetary affairs, warned that "substantial success" could not be achieved in the short term.

Yesterday's commitment from the member states – which includes a promise to step up their own efforts to combat the problem and to cooperate more closely with the European Commission – comes at a time of unprecedented political interest in the fraud issue.

The subject has become so sensitive that it has also raised new tensions between the Commission and the UK Government, which has been running a highly visible campaign in London and Brussels to highlight the problem and force discussion onto the agenda of the Madrid summit in June.

Yesterday's discussions, however, appear to have been relatively low key. At a press briefing last night, Mr Peter Brooke, the UK's Paymaster-General, played down suggestions that Britain had been "pointing the finger" or "attributing the blame to anyone." He said: "The Commission has shown clear evidence of its determination to tackle the matter and go forward together with the member states."

Despite general scepticism about the UK's plans to raise the matter at Madrid, Mr Brooke said Britain reserved the right to do so if "progress is too slow" between now and the next discussion at June's meeting of EC Economics and Finance Ministers.

Yesterday's communiqué was vaguely worded – calling among other things for "measures (especially legislative measures)... to strengthen surveillance systems" – but the Council of Ministers also gave its backing to the European Commission's ideas of last week, including the promise to produce proposals to tighten up procedures in the area of food intervention stores and beef export subsidies, identified last year by the EC's financial watchdog, the Court of Auditors.

Member states also endorsed ideas that the Commission would draw up an annual report on the fight against fraud to be presented to the Council and the European Parliament, and took up a suggestion from Mr Brooke that ways should be found for following up reports from the Court of Auditors on a regular basis.

Notwithstanding a wide range of guesstimates over the past few months, ranging upwards to 20 per cent of the EC budget – or ($10.26bn) – no attempt was made yesterday to quantify the fraud problem. Mr Schmidhuber has consistently refused to speculate on the scale of the scandal, contenting himself with the observation that "substantial success preventing and fighting fraud cannot be achieved in the short term... it can only be achieved by Community institutions and member states setting out long-term priorities."

National bodies blamed, Page 3

Small strike shows large failures in the Soviet system

By Quentin Peel in Moscow

MANAGEMENT and union leaders at a remote Soviet coal mine in northern Siberia have been severely reprimanded by the Communist Party for failing to prevent a strike by more than 100 miners.

Four shifts of workers went under ground at the Severnaya mine in Vorkuta on March 2, and refused to come back to the surface until a string of grievances about their wages, bonuses and the mine management had been met.

The dispute, although small, attracted a level of official attention out of all proportion.

It was settled last week, but only after the men had spent three days under ground, and Mr Mikhail Shchadov, the Minister for the Coal Industry, and four deputy ministers came hot foot to the mining town to prevent the strike spreading.

It provides a rare but symptomatic insight into the failure of the highly centralised and overlapping structure of party, state enterprise and trade union officialdom to deal with genuine shopfloor grievances in the Soviet system.

Reports of the strike reached Moscow at the weekend, revealing that the men took their action after months of working without bonuses, because of chaos on the Soviet railway system, combined with the new rules of self-financing in state enterprises.

At the same time, they were unable to get answers to their grievances. Because their boss was also chairman of their work collective, their trade union refused to intervene, and both were operating hand in glove with the local Communist Party committee.

Details of the dispute were revealed in the Soviet trade union newspaper Trud, which pulled no punches in its equal condemnation of management and union in the affair, as well as the local party committee.

"The miners did not resort to this extreme measure on the spur of the moment," the paper declared. First they addressed the Council of the Work Collective, then the deputy director general of the enterprise, and finally the town committee of the Communist Party ... "but the issues raised by the work collective remained unresolved."

A major problem was that their bonus payments depended on delivery of the mine's coal to end users, but a shortage of railway wagons meant that 600,000 tonnes had

Continued on Page 22

Toyota may spread investment more widely across Europe

By Ian Rodger in Tokyo

MR Shoichiro Toyoda, president of Toyota Motor, Japan's largest motor manufacturer, has hinted that the company is considering spreading its planned European investments across a number of European Community countries.

Speaking at a weekend seminar near Tokyo for leading Japanese and UK businessmen and public officials, Mr Toyoda repeated that the UK was "the most likely host country" for its proposed European passenger car plant. He estimated the company would invest about £800m ($1.02bn) in the plant which would employ about 3,000 people to produce 200,000 cars a year in the 1,990s.

However, Mr Toyoda acknowledged that complaints had been voiced in the EC that Japanese investment in Europe was overly concentrated in the UK. "Japanese companies can help address the complaints by distributing their investment throughout the EC and by procuring parts from other EC countries. We will be grateful for suggestions from you in this regard," he said.

CANON, Japanese office automation group, wants to build its next European factory in the UK. The plant, which would be Canon's first in Britain, would manufacture laser-beam printers or facsimile machines. Page 12

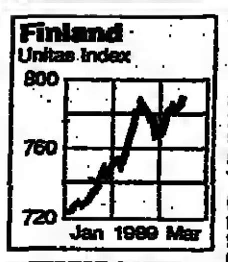
Toyota's objective was to become "a caring multinational corporation," Mr Toyoda said, adding that he wanted people in each host country to regard Toyota as their own national company. "As this kind of company in the United Kingdom, we will regard British problems as our problems. And we will work with the British people to help resolve those problems."

He said frictions were inevitable when different cultures came into contact. "What is important is to face the problems squarely and in co-operation with the local community. This co-operation will reinforce the mutual commitment to making a success of the investment project." This principle also held true for building up local content. "If a manufacturer is truly committed to procuring parts locally, it will co-operate with the local suppliers. By providing them with training and guidance as necessary, the manufacturer can raise the local content of its products while maintaining high standards for quality."

Mr Toyoda was speaking at a seminar of the UK-Japan 2000 Group, a group of senior businessmen and government leaders which meets annually. According to participants, some Japanese were worried about the rise of protectionism in the EC while UK members complained about the still substantial barriers to foreign investment in Japan.

MARKETS

Finland
Unitas Index



INTEREST RATES
US lending
Federal Funds 9¾% (9¾)
3-mth Treasury Bills: yield: 9.02% (9.05)
Long Bond: 97¾ (97¾)
yield: 9.13% (9.14)
London
3-month interbank: close 13% (same)

STERLING
New York close
$1.7130 (1.7175)
London:
$1.7125 (1.7165)
DM3.1975 (3.1950)
FFr10.8325 (10.8375)
SFr2.7800 (2.7300)
Y222.25 (222.00)

DOLLAR
New York close
DM1.8675 (1.8615)
FFr6.3270 (6.3215)
SFr1.5975 (1.5897)
Y130.15 (129.47)
London:
DM1.8670 (1.8625)
FFr6.3260 (6.3175)
SFr1.5965 (1.5920)
Y129.85 (129.45)

GOLD
New York latest Comex month $396.2 (396.5)

STOCK INDICES
New York close
Dow Jones Ind. Av. 2,308.25 (+24.11)
S&P Comp 290.09 (+2.88)
London:
FT-SE 100 2,103.0 (+17.8)
World: 142.04 (Fri)
Tokyo:
Nikkei Ave 31,582.66 (-146.82)
Frankfurt
Commerzbank 1,643.8 (-10.9)

OIL
Brent 15-day (Argus) $17.575 (+0.575) (April)
West Tex Crude $18.235 (+0.41) (April)

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Delors harbours undimmed ambitions for European unity

Mr Jacques Delors, President of the European Commission, believes that "to get maximum advantage out of the creation of the big new European market, we need to go beyond the present European Monetary System." Page 20

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AMERICAN NEWS

Ecuador fights to make the medicine go down

Sarita Kendall on a Latin American president caught between debt and democracy

ECUADOR'S six-month-old Government is struggling to shape policies to tackle inflation, deficits, and the foreign debt, without causing domestic upheavals. President Rodrigo Borja has been dispensing bitter medicines, opting for tight controls and low growth, but the strong business lobby based in the port of Guayaquil is already on the offensive, and the trades unions reacted early with strikes.

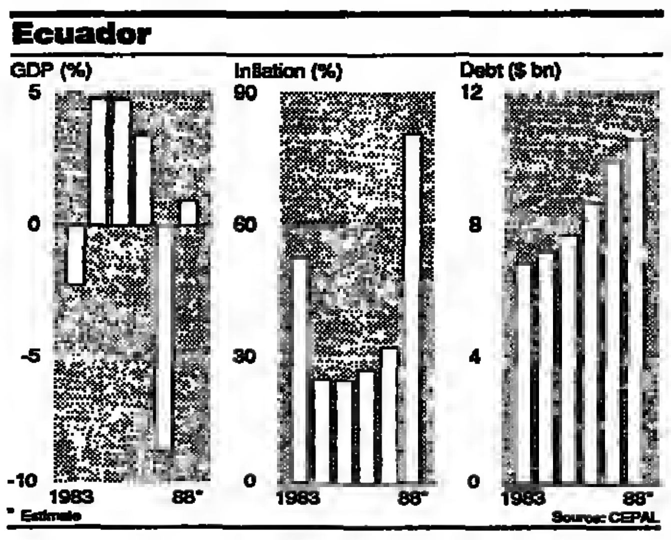
Bringing the inflation rate down – from 90 per cent to 30 per cent during 1989 – is a goal everyone can share. However, many are dismayed by the 0.9 per cent growth forecast, which means a reduction in per capita income. The economic team's prescription – that sacrifices and stabilisation must precede growth – finds less favour as austerity bites deeper. Graffiti on Quito's whitewashed walls accuse the Government of bowing to the policies of the International Monetary Fund, and demand no payments on the foreign debt.

In the last two years, Ecuador has accumulated more than US$1bn in arrears to the commercial banks. A foreign banker said in Quito that he did not see how this could be paid, nor how the $6bn commercial debt could be serviced. "The Government has taken brave steps. The financing plan for 1989 is convincing." But, he added, "they'll be lucky to get an agreement."

Following a recent visit by the IMF, the Government is putting together numbers so that a debt strategy can be drawn up. The commercial creditor banks' economic subcomittee – with representatives from Chase Manhattan, Lloyds and the Bank of America – visited Quito recently to gather information. Those involved in the negotiations are aware it is likely to be a long struggle, regardless of official rhetoric to the contrary. According to one analyst, the banks are becoming impatient with Ecuador's use of low oil prices and the 1987 earthquake as a excuses for non-payment.

Mr Borja's economic policies have dispelled fears (or hopes) that he could move leftward. His pragmatism appears to have reassured the foreign oil companies after the surprise announcement that Cepe, the state oil corporation, would take up its option to manage the trans-Andean pipeline from October. The Energy Minister, Mr Diego Tamariz, said several companies had shown interest in exploring new Amazon blocks and at least two may be put on offer later in the year.

Mr Tamariz confirmed that the Government wanted to develop new oil structures as soon as possible. BP has been negotiating for some time to get an agreement on its Payamino field, which lies close to Cepe-Texaco production centres. Now the main stumbling block is to find Cepe's share of the investment. A heavy crude structure discovered by Conoco also awaits development.



Despite the need for foreign exchange, Mr Borja is being tough with exporters. In the words of one: "It's impossible to export legally and make a profit." Shrimp producers are particularly indignant about new taxes which, they say, could add up to a 10 per cent levy on exports if all the projects go through. "There is uncertainty and disorientation. The new rules are not clear," said Mr Renato del Campo of the shrimp producers' organisation.

A full-page advertisement in the daily newspapers expressed the coastal private sector's opposition to monetary policy and fiscal reforms designed to raise sales and income taxes to 6 per cent of gross domestic product in 1990.

The economic opposition has not been reflected in Congress, which gave the President an easy ride in the first session. An effective parliamentary attack could be mounted only if parties to the right and the left of the President's Social and Christian Democrat alliance teamed up.

The Finance Minister has stressed that Ecuador was prepared to continue negotiating on the foreign debt indefinitely, and this may indeed be the case. "The usual rescheduling mechanisms aren't going to work in this case," said a foreign analyst. Both debt swap programmes and a massive buy-back have been mentioned. Mr Borja, without specifying a figure, is adamant that Ecuador will not pay more than it can afford.

Already the Government has reduced the international reserve deficit from $330m to $140m, and hopes to have a positive figure by the end of 1989. Meanwhile, central bank funds are being funnelled to the private sector – especially agriculture – rather than to bolstering the budget. Agriculture is the only sector expected to grow faster than population this year – at present, Ecuador is spending precious foreign income on rice and sugar imports, which were among its exports not long ago.

Although Mr Borja is being criticised for his failure to outline a longer-term development and growth strategy, his political courage is not in question. Hopes of a broad consensus to back his Social Democrat policies have faded. Thus, yet another Latin American president will be juggling the demands of wage-earners, industrialists, foreign creditors, and primary school children, while trying to keep his nation on the democratic road.

US study clears Audi over pedals

By Roderick Oram in New York

A US government study has concluded that incidents of sudden, uncontrolled acceleration of Audi 5000 cars, the top-of-the-range model imported into the US by Volkswagen, was caused by drivers "misapplying" their feet to accelerator and brake pedals.

Consumers' fears that the German-made cars suffered from a design or manufacturing defect have contributed to plunging US sales in recent years. From a 1985 peak of 74,000 Audis of all models, sales fell to 23,000.

Audi's US subsidiary welcomed the finding. It is defending about 120 product liability suits with damage claims running into billions of dollars. Volkswagen put aside a $100m (£58m) reserve last year to pay court awards.

Responding to government requests, the company recalled 250,000 Audi 5000s in early 1987 to fit a device to lock the automatic transmission's controls. This significantly cut the number of incidents of uncontrolled acceleration.

The government report was careful to say drivers misapplied the pedals. It left open the question whether Audi had designed the pedals badly. "Factors such as pedal location, shape and feel may play a role in pedal misapplication," the report said.

Brady debt plan secures backing in Congress

By Peter Riddell, US Editor, in Washington

THE US Treasury has already secured the backing of key members of Congress for its proposals to relieve the problems of the most heavily indebted countries.

While President George Bush has given his general backing for the thrust of the ideas set out on Friday by Mr Nicholas Brady, the Treasury Secretary, there remain disagreements within the administration over details.

Before the announcement the Treasury was careful to brief and win the support of two of the main congressmen interested in debt issues: Democratic Senator Bill Bradley, who chairs the Senate finance sub-committee on international debt, and Representative Jim Leach, who is a senior Republican member of the House foreign affairs and banking committees. Sen Bradley, a critic of the 1985 Baker plan, welcomed the shift in Mr Brady's proposals towards debt reduction.

There has been some confusion about the president's attitude. On Friday, Mr Marlin Fitzwater, his press spokesman, said Mr Brady's proposals had "not gone to the president in a formal sense, and he has not made any final judgments about a new policy."

Yet there is broad backing from Mr Bush for the new emphasis on debt reduction, since all senior members of the administration accept the urgency of the problem as a result of the deteriorating political position in several Latin American countries.

But disagreement exists over some of the unresolved details. The Federal Reserve in particular is cautious about possible changes in regulations affecting the accounting treatment of debt by banks, while Mr William Seidman, the head of the Federal Deposit Insurance Corporation, has argued that US tax laws should be modified to encourage the write-down of debts.

The next stage is for the US to win the backing of other countries at the meeting of the policy-making interim committee of the International Monetary Fund here in three weeks.

At this meeting there will also be discussion of Mr Brady's relaxation of previous US opposition to an increase in IMF quotas, though discussion of detailed options will not come until later.

The quota review will also involve changes in voting stakes, which are supposed to reflect relative economic strengths, with Japan displacing Britain in second place. This will meet Japan's long-expressed desire to obtain the second largest voting position, as it already has in the World Bank.

The US, currently with 19.1 per cent of the votes, will remain the largest shareholder, probably retaining its veto position as big IMF decisions require approval of 85 per cent of the votes.

At present, Britain is in second place with 6.6 per cent of the votes, with West Germany on 5.8 per cent, France on 4.8 per cent and Japan on 4.5 per cent.

Welcome for Pinochet constitutional moves

By Barbara Durr in Santiago

GENERAL Augusto Pinochet's announcement at the weekend that he is willing to permit amendments to the controversial 1980 constitution was welcomed by most Chilean political groups, but the changes he suggested have met with mixed reaction.

The general marked the March 11 anniversary of the constitution in a speech highly-seasoned with rightist ideology. This was followed by a series of bombings and blackouts, attributed by the authorities to guerrillas.

He mentioned as possible amendments a shortening of the term of the next democratically elected president from eight years to four; a rewriting of Article 8, which outlaws Marxist groups; a reform of the process to amend the constitution; the elimination of the presidential powers to dissolve the Chamber of Deputies and to exile citizens or refuse them entry to the country; and the addition of a member to the National Security Council.

The amendment that many feared he would propose – eliminating the ban on him running for president this year – was omitted, and most political analysts are concluding that this puts his electoral ambitions to rest at last.

Opposition leaders such as the Christian Democratic presidential candidate, Mr Patricio Aylwin, have called the suggested amendments inadequate, and even Mr Sergio Jarpa, chief of the leading conservative party, National Renovation, said they do not solve "the whole subject under debate, but are a beginning."

Both the Christian Democrats and National Renovation, for example, want the whole Senate to be elected directly. Under the constitution, 26 senators are elected and nine can be appointed. In addition, all past presidents can serve as members for life.

The opposition coalition is also demanding the abolition of the provision that keeps the current military commanders in their jobs until 1997.

Gen Pinochet ordered his Interior Minister, Mr Carlos Caceres, to begin consultations with political parties to arrive at a consensus on constitutional changes. This opens the door for the first talks with the opposition, and it is not yet clear how the two sides will handle this opportunity.

If a consensus can be found, the legal process for effecting the changes is not simple. Any amendments, once agreed by the military junta, must be approved in a national plebiscite before the December elections for president and Congress.

Questions remain, too, about how the vote will be carried out. For instance, if no consensus is found, would there be two slates of reforms? Or, would the vote be amendment-by-amendment with some opposition proposals?

US urges Israel to free arrested Palestinians

By Peter Riddell

THE BUSH Administration yesterday made a series of suggestions to Mr Moshe Arens, the Israeli Foreign Minister, aimed at reducing tension in the Israeli-occupied West Bank and Gaza Strip as a prelude to further peace moves in the Middle East.

Mr Arens held talks yesterday with President Bush, Mr James Baker, the Secretary of State, and Mr Brent Scowcroft, the national security adviser, to lay the foundation for a visit here next month by Mr Yitzhak Shamir, the Israeli Prime Minister. Both King Hussein of Jordan and President Hosni Mubarak of Egypt are due in Washington in the next few weeks.

The US yesterday suggested that as a necessary preliminary to more formal negotiations Israel should release some of the Palestinians arrested during the uprising and relax other controls, including administrative detentions and school closings.

Simultaneously, the US plans to ask the Palestine Liberation Organisation, in a further session of formal talks in Tunis, to seek both to halt violent demonstrations in the occupied territories and to block anti-Israeli raids from southern Lebanon.

A US official said the aim of these suggestions to Israel and the PLO was to bring about "confidence-building measures on both sides. It's just basically common sense the before you do anything that you could consider an initiative, you've got to change the conditions and lower the level of violence and confrontation."

The Bush Administration has refused to be rushed into producing a new plan, preferring to hold talks with interested parties. In particular Mr Baker has been more sceptical than his predecessor, Mr George Schultz, about a suggested Middle East peace conference.

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EUROPEAN NEWS

The Social Democrats are bitter over the outcome of Sunday's municipal elections

Change of tack puts Hesse CDU on the rocks

By Haig Simonian in Frankfurt

"WE HAVE been very upset by what has been done here in the last four weeks," said Mr Volker Hauff, a leading Social Democratic Party (SPD) candidate in last Sunday's municipal elections in the West German state of Hesse, following the first results.

Mr Hauff's target was the campaign waged by the ruling Christian Democratic Union (CDU) in Frankfurt. Worried by the unexpected success of the extreme right-wing Republican Party in last month's state elections in West Berlin, the CDU switched tack in the closing weeks of the Hesse campaign from local issues like housing, employment and traffic to a markedly anti-immigrant approach.

The party's rhetoric took on such a sharp tone that Mr Hans Schmidt, local chairman of the neo-Nazi Nationale Partei Deutschlands (NPD), complained that the CDU had taken the wind out of his party's sails by stealing all its slogans.

Sunday's result showed that, in Frankfurt especially, the CDU's tactics may have done just the opposite. The NPD, which had not campaigned in the previous elections in 1985, won 6.6 per cent of the votes, giving it three seats in the city assembly. It also recorded many smaller successes in other parts of the state, including an astonishing 20 per cent of the votes in one north Hesse town.

"The CDU made the NPD and its arguments socially acceptable. It will be the first time such a party has been represented in the history of Frankfurt," said a tired Mr Hauff on Sunday night.

The result is certainly a bitter blow for the CDU in the city it wrested from SPD control in 1977. Its victory then was widely seen as the precursor of the shift in national politics to a CDU-Liberal coalition under Chancellor Helmut Kohl soon after.

Whether the Hesse result, coming hard on the heels of the CDU's poor showing in Berlin, points to another change at federal level remains to be seen. But as they lick their wounds after this latest setback, CDU strategists will already be asking themselves where their party went wrong.

The decision to campaign on an anti-immigrant platform, which called for curbs on political assylum for foreigners and opposition to the granting of voting rights for foreigners put forward by the SPD appears in retrospect to have been a serious tactical error.

The switch meant the CDU lost support on the far right by making voters more aware of the NPD's message – which it may also have made more respectable, as Mr Hauff claims – while putting off many prospective supporters from the centre, worried by the possibility of a "red-green" coalition between the SPD and the environmental Green party in Frankfurt.

The CDU's share of the vote in the city fell by 13 per cent to 36.6 per cent, costing it 11 seats in the city council. By contrast, the SPD gained an extra 1.5 per cent of the vote at 40.1 per cent, while the Greens jumped by 2.1 per cent from 8 per cent in 1985 to breach the psychologically important 10 per cent barrier.

Mr Hauff now faces the tricky task of negotiating a coalition with the Greens in Frankfurt – a prospect many in the city's finanicial community view with trepidation. The prospect of the "red-green" coalition, mirroring that just formed in Berlin, was already affecting local financial markets at the end of last week. If Berlin is anything to go by, the horse trading that will now start in Frankfurt on senior posts will not help.

Working with the Greens will not be easy for Mr Hauff. It is barely two years since the "red-green" coalition which governed Hesse collapsed on the question of nuclear power, opening the way for a CDU victory under Mr Walter Wallmann, its popular candidate who was formerly the mayor of Frankfurt. In the 1985 elections, the CDU under Mr Wallmann won 49.6 per cent of the vote in Frankfurt.

The Greens have already voiced opposition to many of the symbols of the city's "regeneration" under Mr Wallmann. Plans to develop new skyscrapers in the office-hungry city will be investigated for their "environmental and social consequences," according to the Green programme.

No wonder Mr Hauff was talking on Sunday night about the possibility of bringing in some CDU members to broaden his new council beyond the Greens. However, he was emphatic on one point. Any co-operation would only take place with "respectable" CDU representatives, ruling out those responsible for the racially oriented campaign.

As the first day of negotiations to form a new government opened yesterday, he may find that the new polarisation in West German politics first seen in Berlin and now confirmed in Frankfurt is not necessarily such a blessing for the SPD, let alone the CDU.

Berlin Greens leader sees precedent for national poll

By Leslie Colitt in Berlin

THE FORGING of coalition governments between the Social Democrats (SPD) and Greens in West Berlin and Frankfurt could set a precedent for next year's West German general election, according to Mr Hans-Christian Ströbele, a prominent leader of the Greens in Berlin.

Mr Ströbele, the chief architect of the Green party's coalition with the SPD in West Berlin, said that in order to win in West Germany in 1990, however, a "red-green" alliance could not follow the same left-wing policies as in Berlin.

The West Berlin coalition is to be sworn in this week with three out of 13 cabinet posts going to the Alternative List (AL), as the Greens are called in West Berlin. Fittingly for a party in which women outnumber male voters, all posts are to be occupied by women, none of them even AL members.

The greatest danger for the "red-green" coalition in West Berlin, Mr Ströbele said, was that four years from now the AL might have to admit that it was unable to change anything. "The coalition must do fascinating things. That is what is good about the women," he said in an interview.

Many Berliners are sceptical, though, about the longevity of the volatile coalition. West German industry has hit out at the AL's presence in the Berlin government, suggesting that it will cause manufacturers to stop new investments in the city. "The companies talk a lot but they act differently," Mr Ströbele said.

The 49-year-old Berlin lawyer, who defended the Baader-Meinhof terrorists in the 1970s, is no more popular with the orthodox East German leadership. Until recently, he was banned from entering East Germany, along with several other Greens, because of their active support for harassed environment groups in the East.

But, he said the AL was pleased to learn that Mr Walter Momper, the SPD leader in West Berlin and the city's Governing Mayor-to-be, was told by East Germany that it would support his coalition by improving economic, personal and sporting contacts between East and West Berlin.

Mr Ströbele said he and other AL members would continue to demonstrate for causes in which they believed no matter how politically inopportune it seemed. As a fund raiser for the "liberation movement" in El Salvador, he expressed the hope that US policy in Central America would change under President George Bush. If not, he indicated he would be among those who would go "into the streets" whenever the President visited West Berlin.

Kosovo miners under pressure to end protest strike

By Judy Dempsey in Zagreb

ETHNIC Albanian miners in Yugoslavia's southern province of Kosovo, which remains under a partial state of emergency, were under pressure yesterday to return to work after the authorities threatened to impose compulsory measures which carry criminal sanctions.

However, some miners said they would refuse to go back until workers arrested a fortnight ago were released, while others may return to the pits but stage a sit-in.

The workers still being detained were arrested after an eight-day strike by miners who had demanded the reinstatement of the province's party leaders. The latter had been ousted from office in November by Mr Slobodan Milosevic, Serbia's powerful party leader who wants to exercise greater control over the province.

Although reports remain patchy, it is understood that the authorities in Kosovo, in an effort to contain the tension, will not reopen all the mines for "technical" reasons. These include the Stare Trg zinc mine which was at the centre of the strikes. It had been due to open today.

Meanwhile, attention by the Yugoslav media is beginning to focus on events later this week when Mr Ante Markovic, the incoming Prime Minister, will unveil what is thought to be a radical programme aimed at revitalising the economy.

National bodies blamed in EC fraud scandal

THE PRESIDENT of the Court of Auditors, the European Community's financial watchdog, says that national organisations, rather than the European Commission, are responsible for the lion's share of farm subsidy fraud.

Mr Marcel Mart also believes that individual member states may be as slack in the handling of their own revenues and disbursements as they are in the processing of EC funds.

In an interview with the Financial Times he called for the early introduction of common rules and standards to improve EC policy implementation and financial control.

"Practically all the Community's revenues, all its agricultural spending and half its regional and social expenditure are operated by national bodies and officials," he said.

"What we call irregularities and fraud stem from the insufficient monitoring and control by the European Commission over these national systems, and the insufficient help and interest from national organisations and Governments in putting things right."

This, in Mr Mart's view, may have much wider implications. "If there are so many weaknesses isn't there a strong doubt about the reliability of the same organisations pertaining to their own national revenues?" he asked.

Mr Mart's comments will lend welcome support to the Commission, which is upset by the adverse publicity the Community has received on the fraud issue this year, and which has been irritated more recently by what officials see as an opportunistic attempt by the British Government to stir up the controversy.

The Luxembourg-based Court of Auditors and its president are key players in the fraud drama.

It was the Court's spicy special reports on the EC's food stores and export subsidies in the beef sector, issued last December, which most recently alerted observers to the widespread abuse of Common Agricultural Policy funds and raised suspicions that the problem may be on a much bigger scale than hitherto realised.

Despite unsubstantiated estimates that several billion pounds may be involved, the Court of Auditors has consistently refused to be drawn into playing the headline-grabbing numbers game. The only figure which can be safely cited is the aggregate Ecu50m involved in the individual cases described in its beef report.

This sober style is typical of a body which has sometimes been criticised for lack of forthrightness and which is still seen by some as the Cinderella of the EC's institutions.

As Mr Mart points out, however, the original Treaty of 1975 which defined its aims

In an interview with **Tim Dickson**, the head of the EC's Court of Auditors calls for common rules and standards to improve EC policy implementation and financial control

was vague about the balance which should be struck between a straight financial audit (checking that all the EC's revenue and expenditure has been legally committed according to the right procedures) and what he calls the more modern idea of ensuring sound financial management, or value-for-money.

"It wasn't clear to us at the beginning. Many national audit systems in the EC, such as those in Italy, Luxembourg and Greece, are still limited to ensuring legality and regularity, so it took some courage for the Court to go for the modern approach."

To illustrate the point, Mr Mart cites the money paid out under the EC's social and regional funds to help reduce the size of the fishing fleet.

"The money has been paid out perfectly legally but the important question for us is whether the policy has achieved its end, or whether the funds have been used to replace old ships by new ones with higher capacity."

The best publicised case of the Court's auditing work lies in the recently published annual report of the Community's finances for 1987. Mr Mart describes it as the ultimate example of how to present things in a perverse way.

The story of how the 1984 Fontainebleau agreement on limiting the EC's own resources was manipulated to suit the EC's ends – the 1987 financial year, for example, was arbitrarily cut to 10 months to show a 3.6 per cent rise in farm spending when the actual figure was more like 25 per cent – has been well documented.

But while Mr Mart acknowledges that political expediency was at work, he has no sympathy for the light-hearted way in which basic financial and accounting rules were just adapted to circumstances.

"Why fool yourself that you have a budgetary discipline if the first time you have a problem you simply get round it by creative accounting?" he asks in a question just as relevant to the decisions to lift the EC's budgetary ceiling at the Brussels summit more than a year ago.

Mr Mart insists that the Court did speak up at the time but that nobody much in Brussels took note. "There was an informal conspiracy between the Commission and the Council. We were a voice in the wilderness."

The same could have been said about some of the Court's earlier work on agricultural irregularities, notably the well-researched special reports for the European Parliament on the wine and olive oil sectors which, to the Strasbourg assembly's discredit, were largely ignored.

Partly thanks to press and European Parliament reactions, the storage and beef subsidy findings have met with an altogether different response at the Commission and in some, but not all, national capitals. Mr Mart warns, however, that there are no simple solutions.

"Our real message is that the EC must give itself rules on implementation and control to ensure that minimum standards are applied in all 12 countries. It is absolutely useless for one country to tighten up its export subsidy procedures because the fraudsters can just slip over the border."

Interference hits EC broadcasting plans

By William Dawkins in Brussels

EFFORTS to create a common legal framework for television broadcasting across the European Community's 12 member states yesterday ran into fresh interference.

The main cause of the delay was France's renewed insistence at a meeting of EC trade and industry ministers on a guarantee to protect minimum European programme content for cross-frontier television channels. Further complications came from Belgium and West German demands for rules to protect local linguistic interests.

This threatened to plunge the EC's plans into disarray only two days before the 22-nation Council of Europe, the cultural and political organisation, is due to finalise its own rival broadcasting convention.

EC ministers were striving during the night to resolve their differences, in the knowledge that failure to agree would increase the risk of the community's proposals for television being overtaken by the more loosely-drafted Council convention.

Community governments reached an apparent agreement only two weeks ago on the most contentious part of the three-year-old Commission directive. France, Italy and other southern member states had wanted to oblige television channels to carry at least 60 per cent European programmes to qualify for free market access, an idea opposed as unnecessarily restrictive by the UK, West Germany and other northern EC members.

EC governments agreed in principal on a more flexible rule for broadcasting so that channels need only contain a majority of European programmes in line with Council's draft convention but Mrs Edith Cresson, the French European Affairs Minister, yesterday called for the insertion of a clause obliging EC television channels not to reduce their European content from the national average prevailing at the time of the application of the directive.

Looming EC deadline prompts Efta rethink

Robert Taylor previews a summit of the European Free Trade Association in Oslo

THE summit conference starting in Oslo today of the six heads of government in the European Free Trade Association promises to be an important step forward for the economic integration of western Europe. Under the relentless external pressure imposed by the European Community's dynamic of a free internal market by 1992 an attempt will be made to strengthen Efta and give it the power to bargain directly with Brussels on a convergence with the EC.

It was a speech by Mr Jacques Delors, the EC president, to the European Assembly on January 17 that provided the focus for this gathering. His challenge to Efta to develop joint structures with the EC is forcing the easy-going, rather loose-limbed Geneva-based body to reappraise what it is really for.

The driving force inside Efta to strengthen the organisation comes from a newly-forged alliance between its three main Nordic members, Sweden, Finland and Norway (the other Efta members are Iceland, Switzerland and Austria). It is perhaps too grandiose to talk about a Stockholm-Helsinki-Oslo axis inside Efta but there can be little doubt that the EC president has provided its Nordic members with the stimulus they needed to redirect their own national debates about relations with the EC onto the wider trans-European stage.

The Nordic states have been examining the possibility of a customs union as a solution to the problem of reconciling Efta with the EC. This appears to have caused them less concern than might have been expected in the Nordic area, although the concept bristles with real difficulties.

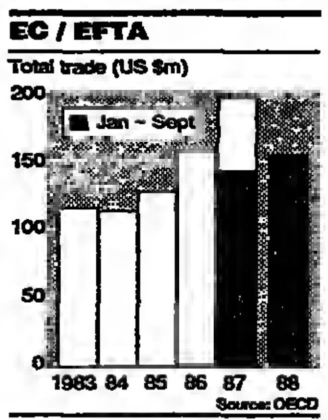
The foreign ministries point out that there is already unfettered trade in manufactured goods between Efta and the EC and all the governments in the region are pledged to introduce the so-called four freedoms covering the movement of goods, services, capital and labour over the next three years in line with the EC's own commitment to the internal market. They argue that the present arrangements fall within the definition of a customs union made by article 24 of the General Agreement on Tariffs and Trade.

But the kind of proposal to be discussed in Oslo this week would require Efta to be covered by the same tariff wall as the EC and involve the creation of some kind of supranational legal authority to police commercial activities between the two economic areas.

These are serious problems, but the Nordic states seem willing to try to resolve them. They do realise there is a great deal at stake for them as well as the EC in achieving success. It is often forgotten that Efta is a bigger trading partner with the EC than the US and Japan put together.

The Nordic majority in Efta is finding it difficult to reconcile both Switzerland, always a laggard when it comes to strengthening Efta, and Austria, still hankering for early EC membership. The Nordic states have been forced to dilute their original intentions for the sake of Efta unity, exposing themselves to the danger that their joint position will turn out to be nothing more than a litany of pious aspirations in the eyes of Brussels.

The present journey began nearly five years ago in Luxembourg where both the EC and Efta pledged themselves to create what they called with a deliberate lack of clarity, "a European economic space" covering all 18 of the continent's



democratic countries. The EC's commitment to the free internal market by 1992 followed a year later and it was this that made the Luxembourg aspiration tangible. As a result Efta has been ready to prepare itself for closer links to the EC with increasing resolve.

Behind the scenes much work has already been done. But there does now appear to be something new happening beneath the Efta calm, which may ensure that the summit in Oslo this week will be much more than a media event, because it does provide the opportunity for the Nordic states to come to terms with the EC without them having to confront the potentially damaging issue of EC membership itself. Indeed, the two-day conference could provide the means for transcending such a question by making it look increasingly unimportant, at least to the Nordic states who are ready to accept an economic integration with the EC that falls short of membership.

Both Sweden and Finland seem unlikely to compromise their traditional belief in neutrality in foreign and defence policy as the price of joining the EC. As a member of the North Atlantic Treaty Organisation, Norway has no obvious self-imposed barrier to belonging to the EC but opinion in that country remains uncertain and the politicians still remember the nightmare referendum of 1972 when the Norwegians rejected the EC, and they do not want a repeat performance.

Despite this, the debate about the EC within the Nordic region has moved with astonishing speed over the past 12 months, even in Finland. There is a commitment in all the Nordic countries to harmonise and deregulate their own economies in parallel with the internal market. National legislation has now to take into full account what has become the practice inside the EC. There is a readiness to open up the traditionally closed financial and industrial sectors to genuine foreign competition.

It is true that the Nordic region's heavily subsidised and protected agriculture does raise problems for those who are anxious to tear down trade barriers. The Nordic political parties dependent on rural votes are noticeably critical of connections with the EC. In Norway and Finland too officials worry about the free movement of labour from the EC much more than they do about integrating financial markets. There is also concern about the reduction and harmonisation of taxes that convergence would require, something that is already causing political trouble in Denmark, the Nordic region's only EC member.

More deeply, many believe that the affluent welfare states of the north will have to reform themselves in such a radical way that it will undermine the values of equality and fraternity on which they are based if they are going to fulfil their promise of coming into line with EC practice.

Until now the most enthusiasm in the Nordic area for convergence with the EC has come from the big multinational companies and the more right-wing political parties. Yet there are encouraging signs that the influential labour movements are in the mood to take a positive view. In January the Efta trade unions, meeting in Vienna, gave their full support for a stronger Efta to negotiate with the EC on convergence and they stressed the need to develop the "social dimension".

Most Nordic policy-makers privately share Mrs Thatcher's Bruges vision of an open Europe of co-operating, but competitive, nation states rather than the more centralising hopes for the EC held by Mr Delors. They are now starting to doubt whether 1992 will really turn out to be as dramatic and irresistible as was once thought.

GE considers $1bn European plastics plant for 1990s

By Peter Marsh in Brussels

GENERAL ELECTRIC, the US company which is the world's biggest maker of specialised engineering plastics used in the automotive and electrical goods industries, is considering a new European plastics plant for the 1990s involving a likely investment of more than $1bn (£555m).

The company, with annual engineering plastic revenues of about $5bn, also plans to step up investment at its existing European plastics factories and is in the early stages of discussing a new plant for producing these materials in the Soviet Union.

Construction of such a factory in the Soviet Union, where GE already has a significant plastics business, would put the company in a good position to exploit the large likely future demand for engineering materials in that country as its industry seeks to modernise over the next decade.

GE accounts for roughly a third of the world market in engineering plastics, demand for which is growing at an estimated 10 per cent a year.

The materials, which include a range of tough plastics with special properties in areas such as heat resistance, are seeing especially high demand in the car and consumer goods industries as replacements either for metal or lower-grade plastics such as polyethylene.

Other leading suppliers of engineering plastics — two of the leading types of which are polycarbonate and acrylonitrile-butadiene-styrene — include Du Pont, Monsanto and Dow Chemical of the US and BASF and Bayer of West Germany.

GE is supplying engineering plastics to several big companies in Europe including Ford, Renault and Volkswagen in the car industry, and Electrolux, the big Swedish consumer goods manufacturer.

The company currently has one large European production site at Bergen op Zoom in the Netherlands and is building a second big facility in Cartagena in Spain. Over the next decade the company is investing $1.7bn in this last project, which it announced last year.

Mr Nani Beccalli, European marketing director for GE's plastics business, said that due to the good growth prospects for these materials, the company was discussing a third large European plant for engineering plastics which would entail investment of more than $1bn.

A start on building this plant would be likely around 1995, he said. The company was "open to suggestion" about a site and so far had no firm ideas on this matter.

GE was considering a range of possibilities about setting up the plant in the Soviet Union, he added.

EC to allocate funds for joint research projects

By William Dawkins in Brussels

EUROPEAN COMMUNITY research ministers will today earmark Ecu798m (£518m) for nine cross-border joint research programmes into subjects from alternative energy to aeronautics and open a potentially sensitive debate on the future direction of EC technology policy.

Todays' accords mean that member states will have almost completed the allocation of the EC's ambitious Ecu5.4bn research and development for the five years to the end of 1991. The European Commission is due to report this year on the effectiveness of this so-called framework programme, under which the EC contributes up to half the cost of cross-border projects in an enormous spread of subjects from high performance computer chips, to common standards for the telecommunications networks of the future and advanced materials.

Mr Filipo Maria Pandolfi, Commissioner for research and development, will today ask ministers for initial views on how the Community should now develop its technology policy in the years ahead. He is keen to refine the Commission's current strategy of influencing a very broad spread of research subjects and focus future subsidies on a limited number of strategic areas where the EC might have a strategic role.

This more disciplined approach is likely to be welcomed by Britain, France and West Germany, which two years ago forced Brussels to more than halve the funding for the current framework programme.

Another issue on which the Commission will seek guidance is the extent to which it should back independent international projects, like the Joint European Semiconductor Silicon proposal for research into advanced chip technology, involving Philips of the Netherlands, Siemens of West Germany and SGS-Thomson, the Italian-French group.

Most of the funding to be agreed today (Ecu500m) is for Brite/Euram, twinned programmes to increase the application of high technology in manufacturing industries including aeronautics, engineering and textiles. Sea pollution, food hygiene, automatic language translation and safe dismantling of nuclear power stations are other areas to benefit from today's package.

Election boosts Rocard's standing

By Paul Betts in Paris

MR Michel Rocard, France's Socialist Prime Minister, appeared in cheerful spirits yesterday after his easy re-election as mayor of the small Parisian suburban centre of Conflans-Sainte-Honorine.

Apart from the personal satisfaction of victory in the first round of the municipal elections last Sunday, the polls have helped reinforce the standing of his minority government and of his party, with the Left gaining about 2 percentage points compared with the 1983 local elections.

Mr Rocard had feared that low turnout and disenchantment caused by the recent wave of public sector strikes would damage the Left.

But in the first round of voting, the Left as a whole and the Socialists in particular held their political ground, fractionally tilting the Left-Right balance in their favour.

The Gaullist RPR party, however, also appeared relieved by the results. Although the Gaullists lost some ground, they remained firmly in control of Paris, the bastion of Mr Jacques Chirac, their leader, and snatched the country's second most important city, Lyons, from the centrist UDF coalition.

But if Sunday's polls have not modified the broad political status quo in the country, they did bring a number of surprises likely to affect next Sunday's decisive second round. The biggest was the breakthrough of the "greens," who in many cities polled 10 per cent or more of the vote and are putting the Socialists in a difficult position.

In several cities, the Socialists will need the votes of the ecologists to secure victory in the second round. At Saint-Brieuc in Brittany, for example, the ecologists scored 14 per cent, preventing the re-election of the outgoing Socialist mayor in the first round.

At Lille, the "green" vote has forced Mr Pierre Mauroy, the first secretary of the Socialist party, to fight a second round run-off.

Since Sunday night, all main Socialist leaders have started making frantic efforts to court the ecologists. But Mr Antoine Waechter, their leader, intends to drive a hard bargain, indicating yesterday that the ecologists were open to negotiations with both Left or Right.

Although Sunday's vote confirmed the national decline of Mr Jean-Marie Le Pen's National Front, it held up well in some urban strongholds.

Its votes, like those of the "greens", could now swing the outcome in some municipalities next Sunday. Mr Le Pen himself scored 15 per cent in the 20th arrondissement of Paris despite his party's disappointing 5 per cent national showing.

In the Parisian dormitory city of Dreux, the Front polled 25 per cent. Mr Le Pen again called on Sunday for a voting pact between the Front and the moderate parties of the Right, but both the RPR and the UDF have, in public at least, vigorously rejected any deal.

For the "greens," their improved score marks a breakthrough after years of struggle to overcome financial problems and apparent media indifference. It reflects a heightening of ecological concern and a new channelling of radical protest votes which previously went to the Communists.

Another sign of this disenchantment was the success of breakaway candidates competing against official representatives of the big parties. In Marseilles, Mr Robert Vigouroux, the outgoing Socialist mayor expelled by his own party, trounced Mr Michel Pezet, the official Socialist candidate, as well as Mr Jean Claude Gaudin, his right-wing rival. In Le Mans, Mr Robert Jarry, the dissident Communist outgoing mayor, was re-elected with a clear majority in the first round, while the official Communist candidate scored a meagre 5.2 per cent.

Mr Rocard claimed that the tide of abstentions had been stemmed on Sunday, But although the abstention rate of 30 per cent was a big improvement on the 50 per cent rate in last September's cantonal elections, it was still a postwar record for the first round of a municipal election.

Turkey hints at foreign role in unrest

By Jim Bodgener in Ankara

THE TURKISH authorities have indirectly signalled that they blame unspecified foreign powers for helping foment in recent days the biggest round of Islamic fundamentalist demonstrations since the 1980 military takeover.

The semi-official Anatolian news agency quoted security officials as alleging "foreign complicity" in the protests against the annulment of a so-called "turban" law.

The law would have permitted the wearing of "turbans" (really headscarves) at universities, a practice forbidden because of modern Turkey's secular tradition.

The demonstrations, which broke out all over the country after Friday prayers, have also been marked by bitter attacks on the novel "The Satanic Verses" and its British author Salman Rushdie, whom Iran's Ayatollah Khomeini has urged Moslems to kill.

The so-called "turban law" was annulled last Tuesday by the country's Constitutional Court. It was passed by Parliament in a second reading in December, after initially being blocked the secularist President Kenan Evren.

Mr Turgut Ozal, the Prime Minister, promised Moslem supporters that his Government would continue with attempts to secure the reversal of the court's decision. His ruling Motherland Party has a strong Islamic conservative faction, and faces critical local elections on 26 March.

Professor Erdal Inonn, leader of the main opposition Social Democratic Populist Party, yesterday called on other parties to refrain from exploiting religious feeling. Neighbouring states had no right to export their regimes to Turkey, he said.

Pan-Europe pocket phone may be launched next year

By Hugo Dixon

A PAN-EUROPEAN version of Britain'e pioneering pocket-telephone service called telepoint could be launched next year if discussions between telecommunications operators across the Continent bear fruit.

The system would allow business travellers and tourists to use the same pocket-telephone to make calls from key locations throughont the region, and be billed for the calls at home.

Planning the system for most of the region rather than just for Britain could drive down costs of making the necessary components, and so help the service take off.

Seven nations are involved in the talks, which are being led by the UK's Department of Trade and Industry. They include most of Western Europe's main economies and between them, account for over 75 per cent of the region's population.

The idea has been modelled on a similar plan to set up a pan-European cellular or car-phone service from 1991. Both initiatives are evidence of the increasing trend among telecommunications companies to "think European".

Telepoint will allow people to make outgoing calls within 100 metres of radio base stations, to be set up in airports, railway stations, shopping centres and other key locations. It will have fewer features than cellular, but will be cheaper and could become a mass-market service.

The UK is due to start telepoint services later this year. But before a pan-European system could begin, the nations would have to agree common technical standards.

These issues are being thrashed out in separate discussions, also being led by the DTI. An official said there had been "heart-warming support" on technical issues from other European countries, but an agreement had yet to be finalised.

The UK was prepared to modify its technical standard in response to suggestions. The main outstanding issue was not so much a technical one, but whether other European countries would be able to gain access to the necessary radio frequencies.

Ceausescu under fire

SIX FORMER Romanian Communist Party officials have sent an open letter to President Nicolae Ceausescu attacking his hard-line policies, Western diplomats and East Bloc journalists in Bucharest said yesterday, Reuter reports from Vienna.

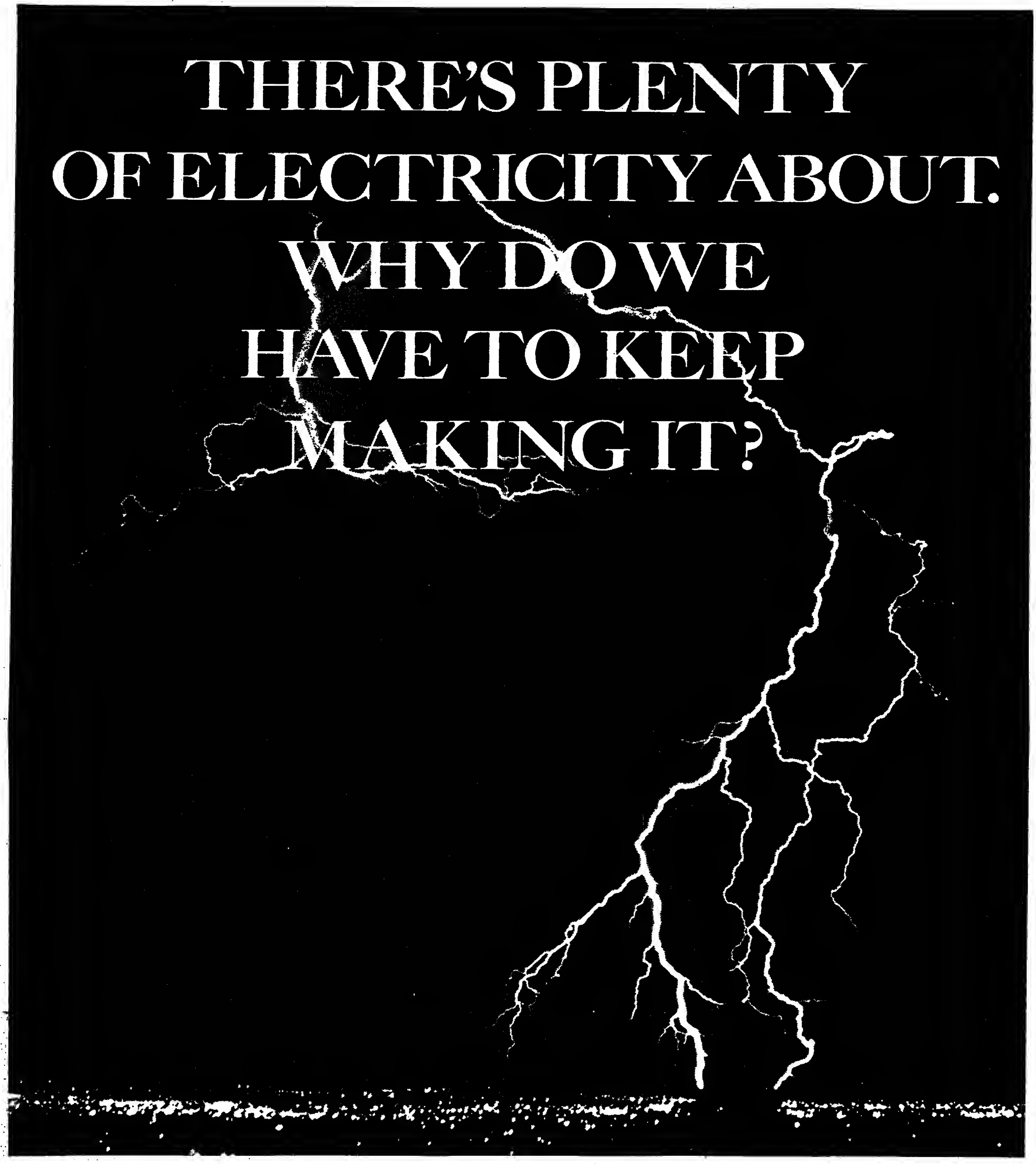
The letter by the six, all prominent Romanians who held eenior party posts, accused Mr Ceausescu of violating human rights agreements, ignoring the constitutional rights of its citizens and mismanaging the economy.

It was seen as the biggest challenge to Mr Ceausescu's rule since riots in Brasov, central Romania, in November 1987.

The letter was signed by Silvin Brucan, 73, a former ambassador to the US and UN; Cornelin Manescu, 73, a former foreign minister and chairman of the UN General Assembly; and Gheorghe Apostol, 77, a former union leader and Politburo member.

All of the signatories were party officials who rose to prominence under Romania'e post-war communist leader Gheorghe Gheorghiu-Dej.

CEGB



Nature just doesn't supply electricity where you want it, when you want it. (As they say, lightning never strikes the same place twice.)

So, to provide the constant and affordable supply of electricity that modern life depends on, we have to generate it ourselves.

And because very little can be stored, we have to keep making and supplying it to the National Grid, which delivers it to your local Electricity Board.

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And all the signs are that demand for electricity is growing. In England and Wales it's risen by 10% over the last ten years.

Meeting this demand takes a great deal of energy. So we conserve it by making ourselves more efficient.

As a result, we're using less fuel to make each unit of electricity. And though fuel costs us a third more than it did 30 years ago, electricity is now cheaper in real terms than it was then.

Efficiency doesn't only cut costs, of course. It's helped to make our generation industry one of the most reliable in the world.

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NATIONAL POWER. POWERGEN.

Israelis halt two Palestinian attacks on border

By Eric Silver in Jerusalem

TWO ABORTIVE Palestinian guerrilla operations in successive days have given Israel more ammunition in its refusal to negotiate with the Palestine Liberation Organisation and to persuade Western opinion that Mr Yassir Arafat's renunciation of terrorism should not be taken at face value.

They coincided with the start of an official visit to Washington by Mr Moshe Arens, the Foreign Minister. The Bush Administration has warned Mr Arafat that these raids put the American-PLO dialogue, begun in Tunis before Christmas, in jeopardy.

In the latest clash, early yesterday, an Israeli patrol shot dead three gunmen of the Palestine Liberation Front intercepted near the village of Meis al-Jabel in the self-proclaimed security zone in southern Lebanon. A military spokesman said the Israelis suffered no casualties.

The PLF is a splinter group, which broke away from Mr Ahmed Jibril's Popular Front-General Command in 1977 under the leadership of Abu Abbas, the man responsible for the 1985 Achille Lauro cruise hijacking. It has since divided into three. The Lebanese-based faction is aligned with the rebel Fatah organisation of Abu Moussa. Unlike the dissident Jibril organisation, the PLF remains within the PLO.

Israeli soldiers killed two of Jibril's men, apparently on a reconnaissance mission in southern Lebanon, on Sunday.

Israeli officers said that the three PLF men killed one kilometre from the Galilee border yesterday were armed with Kalashnikov assault rifles, LAW anti-tank missiles and grenades. They were equipped with wire-cutters, which suggested that they were planning to infiltrate the frontier fence, and carried identity papers and leaflets calling for continuation of the armed struggle.

This was the eighth attempt to strike at Israeli targets from Lebanon since Mr Arafat launched his peace offensive in November. According to Israeli figures, 29 Palestinian fighters and four members of the Israeli-sponsored South Lebanese Army have died and two Israeli soldiers have been wounded in such confrontations since the beginning of 1988.

An Israeli Foreign Ministry spokesman said last night: "In spite of Arafat's public commitment, the PLO has not refrained from using terror. Some of the leaders of member groups have clearly stated their intention to continue doing so in the future.

"It is hard to understand how the PLO expects public opinion in Israel and in the West to take its statements about a change in policy seriously while the commitment to stop terror is being ridiculed by continuous acts of violence at such high frequency."

The director-general of the Prime Minister's office, Mr Yosef Ben-Aharon, reiterated in a radio interview that Israel would not accept the PLO as a negotiating partner under any circumstances. "We have experience with the PLO in the past," he said, "and we know that direct or indirect negotiations with the PLO are fraught with danger for Israel."

On the other flank of the national-unity coalition, Mr Gad Ya'acobi, a Labour minister, welcomed American attempts to mediate a reduction of tension between Israel and the PLO. Mr Ya'acobi, the Communications Minister, said: "We have to be ready to negotiate a peace treaty or some political settlement between Israel and the Palestinians who live in the (occupied) territories, even if they are affiliated directly or indirectly with the PLO."

President Hosni Mubarak of Egypt (left) in Bonn yesterday with West German President Richard von Weizsäcker at the start of a five-day visit

Economic woes of life on the West Bank

Andrew Whitley reports on the growing difficulties facing Palestinian business

The elderly man sat huddled at his desk in the draughty chamber room of the Ramallah Chamber of Commerce. Wrapped up against the cold in a long camel-hair coat and fur hat, he warmed himself at the kerosene heater pulled close to his chair.

President of the 1,300-member businessmen's group for the past eight years, Mr Ibrahim Khalil al-Far was feeling overwhelmed by the succession of economic woes that have struck the West Bank in recent months.

The local branches of the Israeli banks, on which Palestinian businessmen came to depend after 1967, have closed their doors; the value of the Jordanian dinar, the principal currency in the West Bank, has collapsed; tax raids by the Israeli authorities are becoming a daily occurrence; and a rash of strikes for higher pay, to compensate for a sharp increase in the costs of living, has erupted.

There were other reasons for the present distress which Mr al-Far preferred not to go into, because "politics is involved." What he, no doubt, had in mind were the restricted business hours – just three hours in the morning – set by the underground leadership of the uprising, and the frequent political strikes which shut down all commercial activity.

While local manufacturing, encouraged by the uprising's leaders as an alternative to imported Israeli goods, is not affected directly by the strike calls, the cumulative effect on retailing of nearly 15 months disruption has been severe.

A three-day strike last week throughout the West Bank and East Jerusalem, called to protest Israeli policies, was almost universally observed.

A tour of Ramallah, during Jordanian rule a bustling summer resort, and still one of the West Bank's wealthier towns, revealed the toll taken by the intifada, as the uprising is known.

Israeli soldiers force open shops in Ramallah, closed by a continuing wave of strikes and stoppages

Even though it was mid-morning on a "normal" workday, the steel shutters of as many as half the shops were pulled down; broken shop signs had not been replaced and refuse was piling up uncollected.

According to a recent report by the Chamber of Commerce, the standard of living in the West Bank has halved over the past year, from an average of $1,500 per capita to $750.

From being comparable to Jordan, Palestinians now find themselves instead on a statistical par with impoverished Egypt.

An official Israeli estimate, indicating that the Grose National Product of the occupied territories may have declined by a drastic 30 per cent during 1988, broadly supported the Ramallah Chamber's findings.

The hardest blow of all has been the 40-50 per cent depreciation of the dinar, an unforeseen development unconnected with the unrest.

Overnight, Palestinians have seen the value of their personal savings shrink by half, while the real cost of their payments to Israel – for everything from vehicle licenses to utility charges and industrial imports – has risen.

"In future we won't even be able to get the raw materials we need because we can't provide the shekels," said Mr Michel Karkar, a timber merchant in Ramallah.

"We are facing a big recession because of these financial difficulties." The closure of most Israeli bank branches in the West Bank has eliminated what used to be the prime source of shekels for the local economy.

It has also aggravated the difficulties businessmen are facing in obtaining letters of credit.

Moneychangers, who oil the wheels of the informal financial system in the West Bank, are reluctant these days to accept dinars, except at a very poor rate.

Rather than comply with demands to set an artificially high exchange rate against the Israeli currency, an estimated 200 of their number have closed down in recent weeks.

As hardship begins to bite at the door of every home, the number of job seekers in Israel has soared. Each morning dozens of Palestinians from the West Bank can be seen hanging around on street corners near Israeli industrial districts, *hoping to be taken on for the day.*

Earning in shekels, these day labourers, along with thousands of others working for the military-run Civil Administration for the occupied territories, have seen their status in their own communities transformed from that of "collaborationists" pariahs to kings.

Last week, all the chambers of commerce in the West Bank gathered in a big conclave to discuss the worsening situation.

On the agenda were two controversial issues: a demand from local trades unions that employers raise wages by 40 per cent, and calls to set a unified exchange rate for the dinar against the shekel for all transactions.

Agreement on a fixed exchange rate proved impossible. But the politically attuned resolution the chambers came up with did urge employers to compensate their workers for the lower purchasing power of the Jordanian currency, and to make sure they turned out good quality "national products" competitive with Israeli goods.

For good measure, the tax raids and confiscation of property by the Israelis – a growing headache – were roundly condemned.

If it were not for the political implications of closing down in the face of the concerted Israeli pressure, many more than the handful of West Bank companies which have shut their doors would by now have followed suit.

"The situation in the West Bank is like a flour mill without wheat," said Mr Karkar.

On grounds of national solidarity, a few companies have raised their wages substantially.

Others, like Mattin, a manufacturer of high fashion lingerie for export, have taken on more workers, despite the fact that they are running at a loss.

Israeli officials are closely monitoring the psychological state of the population they are fighting and are quick to point out that the weariness in the occupied territories is indeed tangible.

Whether this will lead to a gradual diminution in the Palestinians' will to resist, or else to a new, and more violent, flare-up, is the question to which the Defence Ministry in Tel Aviv would dearly love to have the answer.

How much further to turn the economic screw is currently the subject of an internal debate among policymakers. Mr al-Far, for one, was in no doubt about which way the pendulum would swing.

"People are stuck. The frustration level is rising. This is leading to a very dangerous situation," he said quietly.

Christian-held port bombarded

UK to close West Beirut visa office

BRITAIN said yesterday it was closing its consular and visa sections in West Beirut and repeated a call for Britons to leave the country because of the Salman Rushdie affair, Reuter writes from Beirut. The main embassy office in East Beirut remains open.

"The visa and consular sections of the British embassy will be closed to the public from March 14 until further notice," an embassy statement said.

For the second time in a week, the embassy urged British nationals not to travel to Lebanon and asked those already there to leave.

"The British embassy repeated today its earlier advice to British citizens. As a result of the Rushdie affair the British foreign office is advising British citizens not to travel to Lebanon," it said.

Mr Allan Ramsay, the ambassador, and his staff have been confined to the embassy in the suburb of Rabyeh in Christian East Beirut since last Tuesday because of fears of retaliation by pro-Iranian militants over the Rushdie affair.

Lebanese and British bodyguards, some from the elite Special Air Service Regiment, have recently imposed strict security around the one-storey stone villa housing the embassy, located amid pine trees overlooking the Mediterranean.

Mr Ramsay told Reuters the decision to close the consular office was due to the need to keep a low profile. "It is a question of practicalities since we cannot move around."

He said Britons were at risk in most areas of Lebanon. East Beirut has been regarded as safer for foreigners than the Moslem West in recent years.

Three Britons are among 17 Western hostages in Lebanon, some of them believed held by the pro-Iranian Hizbollah militia. Diplomats and Moslem security sources say the row has dashed hopes that Mr Terry Waite, the Anglican Church envoy, Mr John McCarthy, a journalist, and Mr Brian Keenan, a teacher, might soon be freed.

The embassy says some 2,700 British nationals and their dependents live in Lebanon.

Iran severed diplomatic relations with Britain on Tuesday over the Rushdie affair. It had demanded the UK condemn the author of The Satanic Verses, denounced as blasphemous by many Moslems.

● Moslem-led troops bombarded Beirut's Christian-held port yesterday in a new round of sectarian tit-for-tat action against air and sea traffic, security sources said.

Troops under Maj-Gen Sami al-Khatib fired mortar bombs at the harbour despite a conciliatory move by Gen Michel Aoun, Christian leader, who lifted a two-day ban he had imposed on the Moslem-run airport.

There were no immediate reports of casualties from the bombardment, which followed a week-long power struggle between Gen Aoun's Christian government and a rival Moslem administration.

Gen Aoun's government said earlier it was allowing the airport to reopen because a weekend of fierce artillery duels between its forces and the Druze Progressive Socialist Party had eased. Airport officials said two aircraft of Lebanon's freight airline TMA took off from the airport, which closed on Saturday night.

But Mr Nabih Berri, leader of the Shia Moslem militia, and a member of the Moslem cabinet, told reporters: "The reopening of Beirut's airport is not enough."

Iran may get short shrift in Riyadh

By Finn Barre in Riyadh

FOREIGN ministers of the Organisation of Islamic Conference opened their annual meeting in Riyadh yesterday with Iran seemingly isolated over its call for the death of author Salman Rushdie and on Afghanistan.

Apparently expecting a dusty response to its call for support over the Rushdie affair, Iran has sent a relatively low-level delegation to the meeting of the 46-nation conference, headed not by Dr Ali Akbar Velayati, the Foreign Minister, but by an official of the Ministry of Islamic Guidance, Mr Mohammed Ali Taskhiri.

Iran has been particularly angered by Saudi and Sudanese recognition of the recently-established interim Afghan government which excludes the eight Mujahideen opposition groups based in Iran. The interim government's foreign minister, Gulbuddin Hekmatyar, is not hopeful of taking a seat at the OIC but is canvassing for a more official recognition.

On the question of Salman Rushdie's controversial novel "The Satanic Verses", which Moslems have condemned as blasphemous, the most the OIC is likely to do is order a boycott of Penguin and Viking, the Indian-born author's publishers. The organisation, based in pro-Western Saudi Arabia, will certainly not back Ayatollah Ruhollah Khomeini's call for Mr Rushdie's execution. Moderate states such as Egypt and Pakistan that are dependent upon US aid or Turkey which seeks entry into the EC, would never support such a move.

Iran, however, is seeking to make capital out of the controversy by portraying itself as the leading defender of Islam in the face of attacks by the West and of compromise by Arab moderates.

Iran is also unlikely to get a hearing on raising its quota of pilgrims to the annual Moslem pilgrimage or *hajj*. Last year, the Saudis announced a quota system on pilgrims to Mecca, ostensibly because of major public works projects taking place there. The quota, applied equally to all Muslim states, cut Iran's contingent from 150,000 to less than 50,000. Tehran sent no pilgrims in 1988 rather than agree to the lower quota.

● Pakistan will look after Iran's interests in Britain following Tehran's decision to break diplomatic relations with London over the Salman Rushdie affair, the Foreign Office said on Monday.

"I suspect it will be very much a caretaker operation," the Foreign Office said.

British interests in Iran are looked after by Sweden's Tehran mission.

Iran severed diplomatic relations last Tuesday after Britain refused to denounce the Indian-born author.

Unita denies torturing senior members

By Michael Holman, Africa Editor

ANGOLA'S rebel Unita movement yesterday denied allegations that senior members of the movement had been tortured or killed.

A statement issued in the name of Mr Jeremias Chitunda, Unita vice president, and two other senior officials, described the charges as "propaganda", and part of "a hastily orchestrated vicious campaign" waged from London.

Last night Brigadier Isaias Samakuva, head of Unita's London office, dismissed claims that Mr Tito Chingunji, Unita's former Washington-based foreign secretary, had been tortured or maltreated. Mr Chingunji wae "in good shape" and is Unita's deputy secretary general and number four in the party's hierarchy.

Floods hit Malawi

Flooding in southern Malawi has left 40,000 people homeless, damaged rail and road links and destroyed crops and livestock, officials said yesterday, Reuter writes from Blantyre. The floods are believed to be the worst in Malawi in more than 30 years.

Green quest on banks of the Nile

Tony Walker on the founding of an environmental party in Egypt

DR BAHAADIN Bakri has few illusions about the formidable task he has taken on. The founder of a new Greens party in Egypt said simply: "In Germany they are talking ebout quality of life, here we are concerned about survival."

Immense population pressures, limited arable land and a realisation after prolonged drought that the Nile's bounty cannot be taken for granted has prompted more persistent public questioning of environmental standards in Egypt.

Abdel Fattah al-Qassas, emeritus professor of ecology at Cairo University, lists 10 areas of concern, from the chronic annual loss of farming land to urban development – a process which he describes as the "number one problem" – to serious atmospheric pollution in the cities. Professor Qassas says that epart from lack of social awareness, an absence of strong legal sanctions was a drag on efforts to save the environment.

"The lesson has to be learned," he says, "that not only do we have to produce an (environmental protection) act, but also one with teeth. There must be a stronger mechanism for enforcement."

Dr Bakri says one of the aims of the Greens party in Egypt is to persuade people to appreciate the environment. "People have to be educated how to see beauty and how to feel it," he says. "They have become too used to an environment full of ugliness."

The lack of green space in Cairo – in a city of 14m it amounts to about 10cm per person – is one of Dr Bakri's main concerns. It was the aim of his party, he said, to increase this to one square metre a person within 25 years.

The authorities, somewhat belatedly it seems, are trying to arrest environmental degradation in Egypt. Dr Mohammedi Eid, head of Egypt's Environmental Protection Agency, insists that a number of additional steps are being taken under existing and proposed new laws to protect the Nile and to combat atmospheric pollution.

These include a halt to factories discharging effluent into the Nile, e programme to ensure that cement plants – one of the main sources of atmospheric pollution in Cairo – install filters, and plans to make the issuing of licences for motor vehicles dependent on their meeting basic emission standards.

These are all noble aims, but Egyptians concerned about environmental issues question whether the Government has the political will or the organisational ability to implement more rigorous controls in a country labouring under huge population pressures – Egypt'e 52m will double in the next 25 years – and economic restraints.

Only 4 per cent of Egypt is arable and efforts to reclaim the desert for agriculture – about 1m acres has been reclaimed since the 1950s – have been more than offset by the loss of prime agricultural land to urban development. Prof Qassas estimates that between 10,000-20,000 acres are "lost" annually for housebuilding, road development or other public works programmes in spite of a government ban on such practices.

Likewise, measures to reduce atmospheric pollution have been ineffectual. Prof Qassas estimated the "fallout" over Cairo of polluted materials, including dust and rubbish particles impregnated with hydrocarbons from vehicle emissions, at between 100-200 tons a square mile each month. "This is the most serious thing," he declared, "because this is carcinogenic."

In spite of a 1983 law to establish them, he said, "we don't have a single nature reserve operating as one" under adequate and specialised supervision. The Red Sea, one of the busiest shipping thoroughfares in the world, had become a "mega oil pipeline", polluted by oil spills and the discharge of ballast.

Dr Shafiha Nasser, Professor of Community Medicine at Cairo University, is concerned about the misuse of pesticides and about lead in the atmospbere from vehicle emissions. Aerial spraying of cotton crops in closely-settled areas was also dangerous and chemicals may have found their way into the food chain.

Dr Bakri saye the Government lacks vision. "They have no national dream of what sort of society we want to be in 30 years. There is an absence of a strategic project which defines the objectives of the regime and its ultimate goals."

Amnesty asks Kampuchea to free political prisoners

AMNESTY International has appealed to the Kampuchean Government for information on more than 400 people it said could either have died in jail or been unfairly imprisoned, Reuter reports from Bangkok.

The London-based human rights group asked Phnom Penh in a statement for information on some 35 political prisoners it said were reported summarily executed or to have died in jail because of harsh conditions or abuse.

Amnesty said it was concerned about the Kampuchean Government's "apparent failure to investigate reports that political prisoners have died in *detention as a result of* ill-treatment or harsh prison conditions or by being summarily executed without any form of trial."

The report also sought information on 342 political prisoners it said had been arrested since the communist government took power in 1979.

It asked about the fate of 56 other people officially reported imprisoned after what Amnesty said were apparently unfair trials.

"With regard to any political prisoners now held without charge, (Amnesty) is once again urging the Government either to promptly charge them with recognisably criminal offences and fairly try them, or to release them."

Amnesty said it had been refused permission to enter Kampuchea so had difficulty researching human rights matters there. Phnom Penh had failed to reply to several letters from Amnesty on rights issues, it said.

The People's Republic of Kampuchea was set up after Vietnamese troops overthrew the former Khmer Rouge government.

It is fighting tens of thousands of guerrillas backed by China and the West.

The government announced an amnesty for reformed prisoners in May 1988 but the human rights group said it was not clear if it applied to political detainees.

Refugees flee fighting in Sudan

THERE has been a sharp increase in the number of Sudanese refugees arriving in Ethiopia in the past six weeks following increased fighting in southern Sudan, a senior United Nations refugee official said yesterday, Reuter reports from Addis Ababa.

Mr Albert-Alain Peters, who represents the UN High Commissioner for Refugees (UNHCR) in Africa, said more than 400 refugees had been arriving each day since early March.

The latest refugee influx began in February after a lull of five months and had swollen the numbers of Sudanese refugees in western Ethiopia to about 335,000, he added.

An average of 420 refugees per day had arrived at the two main refugee camps of Itang and Fuaido in the first 10 days of March, indicating a "a possible dramatic influx of refugees into Ethiopia," Mr Peters said.

He said most of the new arrivals were from the Upper Nile and Equatoria provinces of south-eastern Sudan, where the rebel Sudan People's Liberation Army (SPLA) has recently captured several government-held towns.

About half of the new arrivals were children aged between five and 15, a fifth were young women and the rest were mature adults, he added.

Most of the refugees were reasonably well nourished, unlike the hordes of walking skeletons who arrived in Ethiopia last year

The latest escalation in fighting in southern Sudan has also sent about 28,000 Sudanese refugees fleeing into Uganda since the beginning of March, although there were signs that the influx of new arrivals there appears to have stopped.

Bangladesh unable to raise local funds for tied aid projects

By Reazuddin Ahmed in Dhaka

BANGLADESH'S attempts to struggle out of the devastation of last year's floods, which at one time submerged three quarters of the country, are being severely hampered by the lack of local funds for tied aid projects.

A recent World Bank investigation discovered that $4.6bn of project aid remains unused because the local economy is in so parlous a state that it cannot stump up the portion of local investment without which in the projects cannot be funded.

This could have e knock-on effect making it difficult for the World Bank to justify recommending a higher level of project aid for Bangladesh at next month's meeting of donors in Paris.

The World Bank appraisal team has identified resource constraints and increased revenue spending in unproductive sectors as the main causes of slow growth of the economy. It forecasts a nominal growth of GDP of between 1 and 2 per cent for the current fiscal year, below the rate of population growth of around 2.4 per cent.

The Bank is expected to recommend to the Paris aid meeting that Bangladesh should receive slightly more than $2bn for the next fiscal year, starting on July 1, the final year of the country's third five-year plan. Last year the aid consortium approved about $2bn for three sectors – food, commodities and project aid. This year's request is expected again to include $300m for food imports to cover 1.5m tons of foodgrains to make up for the normal annual shortfall.

The economic picture is not all gloom. Exports are strong with $1.3bn earnings projected this year with some sectors, notably garments, performing exceptionally well. Remittances from overseas workers, rising to $750m, continue to help to plug the trade gap. And despite the devastating floods Bangladesh's agricultural sector has recovered sufficiently to produce a harvest of 16m tonnes of rice and wheat likely this year.

A recent US State Department report applauded the agricultural recovery which has helped diminish the feared prospect of starvation in the country of 110m people, most living on the margins of subsistence. Per capita income at $165 is among the world's lowest.

However, the economy urgently needs aid injections to finance imports of consumer goods and industrial raw materials. The Government has therefore asked the World Bank to ask donors for increases in commodity aid for the next fiscal year.

The floods in September and October left more than 3m people homeless and there was widespread damage to dwellings, roads, bridges, culverts, railway tracks, mills and factories. The Government had to divert resources from development projects to repairing the infrastructure and towards providing immediate food, shelter and medicine.

This has depressed economic activity, with sluggish industrial production, lack of new investment and a slow-down in job creation for the millions of unemployed people combining to put the growth target of 5.5 per cent for the five-year plan further out of reach than ever.

During the first two years of the plan, from 1984-1986, growth averaged 4 per cent a year. By last year *it had declined to 3 per cent last year* and projections since the flood are yet more dismal.

In addition to the difficulties caused by shrinking domestic demand, local industries also suffer from competition through the smuggling of consumer goods, mainly from Thailand, Singapore and India. The smuggled goods ere often better quality and cheaper than local goods. Smuggling continues unabated, in spite of government measures to curb it, perhaps because when the policy makers sit down to devise ways and means to combat smuggling they are likely to have contraband cigarettes in their pockets.

Iran may get short shrift in Riyadh

Refugees fighting in Sudan

WORLD TRADE NEWS

US-Japan pact on FSX fighter threatened

By Nancy Dunne in Washington

OPPOSITION IN Congress and the Bush Administratiou is increasingly threatening completion of a US-Japanese agreement to co-develop and co-produce the advanced version of the F-16 fighter, known as the FSX.

President Bush is expected to approve a modified version of the agreement reached by the Reagan Administration, but his Administratiou has been deeply divided over the FSX, with the Pentagon in favour, and the Commerce Department and the US Trade Representative dubious.

A compromise came unstuck last week when the Peotagon would not accept the insistence by the Commerce Department for "significant limits" on the level of technology to be transferred.

Charges that Mitsubishi Heavy Industries coutributed to productiou of a Libyan chemical weapons factory have raised a new complicatiou. Despite White House assertions that the reports are without foundation, Congressman Duncan Hunter, chairman of the Republican research committee, will this week introduce a bill to ban Mitsubishi, Toshiba Electronics and other alleged offenders from the US market.

The reports were said to be leaked from a top-secret briefing in Congress. "If true, this diversion shows that Mitsubishi should not be allowed to participate in the FSX jet fighter programme," said Mr Hunter.

Even if not true, heightened American fears of Japan's economic prowess and resentment over its trade policies could sink the FSX deal. Under the agreement, General Dynamics would join forces with Mitsubishi to produce the new aircraft.

Mr Frank Carlucci, former US Defence Secretary, has warned that US-Japanese defence relations are at stake. Last Friday, he sought to soothe congressional concerns that the Japanese would use US technology to launch their own competing defence or commercial aircraft industries.

The technology to be transferred is 10 years old, he said, as has already been part of co-production deals with 10 other countries.

Further, General Dynamics would get a "flowback" of new technology to be developed in the project worth about \$500m (£277m), a work share in the development phase worth about \$500m, and about \$2bn in the production phase.

Mr Carlucci acknowledged that the agreement did not specifically give General Dynamics a share of the production work, but this would be nailed down in another contract when the US agrees to negotiate the transfer of engines and other technology.

Congress trade "hawks" remain sceptical that the "flowback" would be of particular value and that the US will get the 40 per cent share of production work promised by the Administration.

Battle lines within the Administration are a reversal of the long dispute over export controls, which attempt to keep technology out of the hands of the Eastern bloc countries. In that fight, the Commerce Department, representing business, is inclined to take risks, and the Pentagon pushes for technology controls.

The business lobby sees US economic interests as a major component of national security and argues that economic competitiveness requires brisk sales and strong profits.

It is on the same grounds that the Commerce Department and the Trade Representative are concerned about loss of competitive technology to Japan.

The Pentagon wants Japan to take increased responsibility for its own defence. An SFX compromise has been floated which would have Japan putting in an early offer for American Awacs and refuelling aircraft to reassure Congress about US defence exports.

Some officials believe President Bush will have to resolve the dispute. His conclusion will give some indication of how vigorously the US will guard its military advantages and battle for market access to Japan.

Companies in US fear competition after 1992

By Pratap Chatterjee

MAJOR US companies believe European trade harmonisation in 1992 will pose a competitive threat to them both in Europe and at home but do not have a plan to counter it.

A survey of 103 Fortune 500 companies with Europeau operations, published by management cousultants Booz Alleu and Hamilton, revealed that 62 per cent of the companies have no strategic plan for responding to 1992, although a majority agreed they would be at a competitive disadvantage to European companies in Europe.

More than half believe 1992 will make European Community companies more competitive in the US. Many are already concerned about the increase in European acquisitions there.

Three-quarters of the companies believe the US Government should intercede with the EC, to ensure they have similar opportunities to make acquisitions in Europe.

But more than half were unaware of the EC White Paper on 1992 that set out 300 proposals analysing the barriers to be eliminated and actions to be taken.

Four out of five Fortune 500 companies have Enropean operations. Among companies surveyed, just over half plan to add uew executives to their European offshoots in the next few years.

In terms of meeting the European challenge, 21 per cent already have joint venture or merger and acquisition plans while 14 per cent will focue on organisational change. Almost a third of those refocusing will concentrate on cross-border consolidations.

In the long run, US companies feel 1992 will result in a global restructuring of individual industries, after which the strongest players will emerge.

Mr Paul Branstad, Booz Allen's strategy chief, said that in order to stay competitive, US companies would have to find out how 1992 would result in the restructuring of their European competitors and whether they could restructure their existing European operations in a similar way.

Keeping Gatt talks on the front burner

Peter Montagnon on why the Uruguay Round is seen as crucial for EC chemicals

UNLIKE its US counterpart, European industry has been slow to make its voice heard in the Uruguay Round of multilateral trade negotiations. Yet if there is one sector which has sought doggedly to exploit the round to further its interests, it is the chemical industry.

Ont of worldwide sales of some Ecu111.5bu (£72bn) in 1987, European chemical companies transacted no less than Ecu45.9bn outside the Community.

This gives the chemical sector a clear long-term interest in preserving the multilateral trading system even though it is currently more fashionable to concentrate on the single market plauued for 1992, according to Mr Guenter Metz, deputy chairman of of the managing board of Hoechst and president of the European Chemical Industry Federation (Cefic).

The outcome of the Uruguay Round will have a profound practical effect on the European chemical industry, uot only because it is concerned with keeping markets open for trade in goods, hut also because the results in some areas of the talks – such as intellectual property protection – will have a lot to do with how much and where the industry will invest in future, Mr Metz said in an interview.

"We want free access (to markets), the protection of intellectual property, and the chance to trade so as to make use of our existing investments and also to make more."

Ever since the Uruguay Round began, the chemical industry has been actively engaged in lobbying both through national associations at member government level and, through Cefic, directly with the Commission in Brussels.

Compared with the US, however, whose elaborate system of consultation between private sector industry and officialdom allowed business a considerable say in the formulation of trade policy, it was much harder for European industry to make its influence felt, Mr Metz admitted.

Chemical companies with their worldwide operations found it easy to agree among themselves on the objective of liberal trade, bnt forming a broader consensus across the economy as a whole was difficult because other European industrial sectors, such as the automotive industry, had more complex problems. In Europe, where governments also had differing attitudes towards the General Agreement on Tariffs and Trade (Gatt), political contacts were of uecessity fragmented.

Gatt suffered also because it was seen in Europe as "a technical instrument" which was very much the preserve of specialists, Mr Metz added. Yet it is at this level that he and his colleagues produce a long agenda of specific objectives for Uruguay Round.

Metz: 'We must be political'

These range from the need for a code of practice on pre-shipment inspection to emerge from the talks on reducing non-tariff barriers to trade, to improved rules on dispute settlement and safeguards which allow restraints to be erected against surges of low-priced imports.

In particular its frustrated attempts to win EC-wide protection against cheap imports of urea from eastern Europe and the Middle East have led Cefic to conclude that industry, and not just government, should be permitted a direct say in bringing requests for safeguard action to the Gatt which should then adjudicate the request for export restraint on its merits.

Cefic also feels the European chemical industry was unfairly sucked into the solution of the transatlantic dispute over the accession of Spain and Portugal to the EC. The dispute itself was mainly about the effect on US farm exports, but when compensation for this was negotiated, French chemical companies had to pay a sacrifice in terms of reduced sales of bromide to the US.

When compensation was negotiated under Gatt dispute settlement procedures, "contracting parties should not just go aside and make a backroom deal", said Mr Hugo Lever, Cefic director general.

Despite its preoccupation with investment, Cefic has paid little attention so far to the trade-related investment measures (Trims) part of the Uruguay Round agenda. This is both because the Trims talks are still at an embryonic stage and because many of the factors that inhibit investment by the chemical industry, especially intellectual property, are being dealt with in other parts of the Round.

Mr Metz was reluctant to give figures for the losses sustained by European chemical companies as a result of the failure of developing countries to respect intellectual property rights. But he said investment in India had suffered as a result and frictions had developed with a number of newly-industrialising economies such as Brazil and Thailand.

These countries should realise that accepting tighter rules on intellectual property would be in their own best interest. It was not a question of multinational companies from industrial countries seeking to retain control of their own technology, said Mr Jean-Marc Bruel, executive vice-president of Rhone-Poulenc and vice-president of Cefic. "You transfer technology all the more easily when you are sure it will be protected."

Cefic has endorsed the tripartite proposals drawn up by industry in Europe, the US and Japan for a code of practice on intellectual property with detailed dispute settlement and enforcement procedures to be agreed in the Uruguay Round. Whether such a code materialises will depend at least in part, however, on what happens in other areas of the Round as well as how successfully the private sector is at lobbying.

Mr Metz said he understood the Commission's difficulties over agreeing to farm reform as part of the Round, but agriculture should not be allowed to become a bottleneck. At some stage, too, private businessmen might need to develop a greater instinct for getting their views across, with possibly more formalised arrangements for doing so.

"We still have to learn to become more political animals than we are used to being. This is to some extent for European industrialists a new field. We have to play as industrialists a bigger role than we have played before," he said.

E Germany to make first 4-megabit chip next year

By Peter Montagnon in Leipzig

EAST GERMANY intends to produce a first 4-megabit memory chip next year, only two years after its first 1-megabit chip was announced by the Carl Zeiss Jena electronic and optical engineering combine.

The advance follows investment in micro-electronics amounting to East German Marks 14bn (£4.3bn) over the past three years, according to Mr Wolfgang Nordwig, deputy general manager of Carl Zeiss.

Western experts say that although East Germany has now developed the technology for high-capacity memories, it still has to take account of the challenge of moving from the research stage into large-scale high-quality production.

Pilot production of 1-megabit memories – amounting to a few million chips – will only begin this year, Mr Nordwig said at the Leipzig Fair.

East Germany did not intend to try to recoup its investment by using its new capability to win a market share in the integrated circuit market in Western Europe and Japan. Most of its production would go to supply its own industries.

UK company to share machine gun output

By David White, Defence Correspondent

GENERAL ELECTRIC of the US has agreed to share productiou of a uew .50-calihre machine gun with the British munitions group Astra Holdings, the UK company said.

Astra is to make the weapons, which work on the principle of revolving barrels, at its BMARC subsidiary at Grantham, Lincolnshire, a former part of the Swiss Oerlikon-Bührle group.

The guns are expected to be sold to a wide range of countries including most of Nato.

US and EC to renew effort to solve farm subsidy row

By Tim Dickson in Brussels

US and EC officials will continue efforts in Brussels later this week to bridge the still wide gap between the two sides on how to reduce the level of farm subsidies.

The negotiations are seen as a crucial part of the build-up to next month's review in Geneva of progress so far in the multilateral trade talks known as the Gatt Uruguay Round.

They are a "follow-up" to this weekend's apparently inconclusive meeting in Brussels between Mrs Carla Hills and Mr Clayton Yeutter, respectively US Trade Representative and Agriculture Secretary, and Mr Frans Andriessen and Mr Raymond MacSharry, EC Commissioners for External Relations and Agriculture.

Neither side was prepared to be specific about the outcome so far, but the US insisted there had been "some progress".

Mr Andriessen said the discussions had focused on key "principles and ideas. The exact wording is not the most important thing". Officials said Mr MacSharry had taken a tough stance.

UK NEWS

Coal chief calls case for nuclear power 'flawed'

By Maurice Samuelson

SIR ROBERT HASLAM, chairman of British Coal, yesterday accused Government ministers of using "flawed" arguments to back nuclear power and said that electricity from nuclear power stations was 40 per cent more expensive than from coal-fired plants.

Sir Robert warned, in the strongest ever broadside against nuclear power by a British Coal chairman, that a privatised electricity industry might be unable to keep the power on if it turned to imported coal, and forced more British pits out of business.

His reference to the "flawed arguments" being used to justify more nuclear power was aimed at claims, aired by Mr Nicholas Ridley, Environment Secretary, and echoed by Mrs Margaret Thatcher, the Prime Minister, that coal's contribution to ozone depletion and the "greenhouse effect" on the atmosphere made it environmentally more harmful than nuclear stations.

He said that coal-fired power stations contributed only 7 per cent of global gas emissions, and UK power stations less than ½ per cent. Natural gas, meanwhile, contributed 6 per cent and oil, primarily for transport, 16 per cent. "This tends not to be highlighted as it is obviously a much more unpopular target," Sir Robert said.

On the relative economic merits of nuclear and coal power, Sir Robert noted that the "debate is over", with the Government CEGB accepting that nuclear plants' costs were higher than those of coal "and there is evidence the gap in the immediate future will be as high as 40 per cent."

Building trade deficit rises to record £2.6bn

By Andrew Taylor, Construction Correspondent

BRITAIN's trade deficit in building materials rose by 28 per cent last year to a record £2.6bn as domestic material producers and suppliers failed to keep pace with sharply rising demand from the British construction industry.

The annual trade deficit on building materials has risen from just under £400m in 1981 to account for more than 10 per cent of Britain's visible trade deficit of £20.5bn last year.

Building material imports rose to £4.17bn last year from £3.55bn in 1987. Exports last year rose only slightly to £1.6bn according to Department of Environment figures.

UK construction output has risen every year since 1981, and by more than a sixth in the last two years. Some materials suppliers and producers have lacked the capacity to cope with demand which has turned to imports.

Cement makers, which had complained about cut-priced imports entering Britain, have in the past year been importing themselves to meet demand. Britain's cement trade deficit almost trebled last year to £71m. Timber accounted for the biggest deficit, almost £1bn, with timber imports rising by 13 per cent to £970m. Plywood, veneers and manufactured goods added a further £700m to the trade deficit.

Ths National Economic Development Office which has been advising building material producers how to combat import competition said ths worrying aspect of the figures was the rising deficit in manufactured goods.

Warning: beware official statistics

Simon Holberton looks at the difficult task of charting the economy

WHEN Mr Nigel Lawson, the Chancellor of the Exchequer, stands at the despatch box this afternoon to deliver his sixth budget, his review of the state of the British economy is likely to carry a health warning: Beware official statistics.

He will want to tell an upbeat story, part of which will concern his belief that business investment has grown rapidly over the past year. The official statistics, however, tell another tale: virtually no growth in the volume of new investment since the April-May period of last year.

The Chancellor is right to issue this health warning. Britain's national and financial accounts – a series of tables which are meant to describe how the economy performed – do not add up. This has made Mr Lawson's job of charting a stable course for the economy as difficult as it has for those interested in checking his progress.

These errors in the accounts have grown to such proportions that for 1988 the under-recording of expenditure is likely to equal about 3 per cent of gross domestic product. Was it due to the consumer spending more? Or did companies invest more in plant, machinery or stocks. Or, then again, did British business export more than went recorded? No one really knows.

On Friday last week, the Central Statistical Office (CSO) published an experiment in making the accounts for 1985-87 add up. The national and financial accounts, the single most important set of documents for analysing the British economy, have been plagued by two large and growing "black holes":

● **Residual error.** This is the difference between the measurement of GDP by expenditure, GDP(E), and the measurement of GDP by income, GDP(I) in terms of current money.

In theory, all the measures of GDP – and there is a third, GDP as measured by output, GDP(O) – should be equal to each other as they all measure the same thing: the sum of the output of goods and services of the UK.

In practice, they do not. This is not remarkable in itself, given the complexity and diversity of the UK economy. The problem is that the divergence between the growth of GDP(E) and GDP(I) has become worse.

In the first nine months of 1988, the accounts show an excess of income over expenditure of more than £7bn, compared with more than £2bn for the same period of 1987.

This yawning gap in the national accounts has produced different rates of growth for the different measures of the economy.

Depending on which measure used, up to the third quarter of last year the economy was *either* in *recession or* booming along.

● **The balancing item of the balance of payments.** This reconciles deficiencies in the capital account of the balance of payments – transactions in capital items, either foreign investment in the UK or UK investment abroad – so that they equal trade in goods and services.

BALANCING THE UK'S ACCOUNTS

	1985 Blue Book[1]	1985 Balanced	1986 Blue Book	1986 Balanced	1987 Blue Book	1987 Balanced
Growth rates						
(% increase over previous year)						
Income from employment			7.7	7.5	8.0	8.8
Industrial and commercial company profits			-4.4	-6.8	23.2	20.8
Personal sector consumption[2]			10.0	10.0	9.2	9.5
Gross domestic fixed capital formation			5.8	5.9	10.9	13.4
Exports of goods and services			-4.2	-4.2	9.2	9.1
Imports of goods and services			2.4	2.0	10.3	10.5
Other derived statistics						
Personal savings ratio (%)	9.5	10.5	7.3	8.6	5.4	7.3
Current balance of payments (£bn)	3.3	4.5	0.2	2.5	-2.5	-1.5

[1]1988 Blue Book [2]Consumers' expenditure

Source: CSO Economic Trends, February 1989

Provisional figures show that the UK *had* a current account deficit of £14.7bn in 1988. To make the balance of payments "balance," transactions in assets and liabilities should have summed to a surplus of £14.7bn. Instead, a deficit of £562m was recorded and a balancing item of £15.2bn needed to reconcile the accounts.

Something is badly wrong when the figure needed to "balance" the balance of payments is larger than the current account deficit itself.

The CSO's investigation into the 1985-87 period, which relied mainly upon the subjective views of the *professionals* responsible for compiling various segments of the accounts, highlighted some potential problem areas in the accounts.

The exercise did not change materially what the CSO knew about *the rate of economic* growth in the UK over the period under study. What it did highlight was change in the composition of that growth.

In particular, it suggested that there had been some seri*ous under-recording* of investment and savings, while the recent growth in company profits and the deterioration in Britain's trade had been probably over-estimated.

The "balancing" exercise *also suggested* that there had been far less investment in equities and bonds by the personal sector than was first thought.

The CSO intended the exercise as a contribution to the debate on *how* to improve the quality of the national accounts. As such, it was well-received by the Treasury which also saw in it the reflection of its belief that the national accounts were giving a *distorted* view of economy's performance.

The exercise improved the look of Britain's trade account by apportioning some of the *balancing* item to the current account.

It also produced a higher growth rate for investment in 1987 – 13¼ per cent growth instead of 11 per cent – and showed that while there had been a fall in the savings ratio, it had not been as steep or severe as the official figures showed.

The CSO's study drew short of making any recommendations on the improvement of the accounts but, by highlighting the company sector as one of the main sources of the problem, it underlined one of the key problems with the present decentralised method of collecting official data in the UK.

After Easter, the Government should announce what it intends to do with the CSO, following a review which examined ways to improve the data the Government publishes.

Several options have been considered, including centralising data collection in an enlarged CSO kept within the Cabinet Office or transfered to *the Treasury*.

Mr Peter Spencer, UK economist with Shearson Lehman Hutton, said one of the main problems with official figures was that industry was not required by law to provide *information to* the Government.

Manchester crash investigators deliver verdict

Air inquiry calls for urgent smoke safety measures

By Michael Donne, Aerospace Correspondent

THE INTRODUCTION of smoke hoods for airline passengers, water sprinklers in cabins and closed-circuit TV for flight-deck crews are all now regarded as only a matter of time in the UK, and probably also in world aviation.

This emerged yesterday following publication of the Government's report into the Manchester air disaster of August 22 1985, and the detailed response of the Civil Aviation Authority (CAA).

Fifty-five passengers and crew died when a Boeing 737 of British Airtours caught fire on takeoff.

The report from the Department of Transport's Air Accidents Investigation Branch, published yesterday, says the long delay in producing the final report was due to the fact that no less than 48 of deaths were caused by inhalation of smoke and toxic gases.

The report said urgent consideration should be given to a requirement for smoke hoods for passengers, a recommendation immediately endorsed by MPs and consumerist bodies.

Mr Robert McCrindle, chairman of the all-party Parliamentary Aviation Committee, was joined by the Consumers' Association in urging an interim introduction of smoke hoods, pending the results of more detailed research into their efficiency.

The AAIB's report lists 31 safety recommendations following its detailed study of the Manchester accident.

The CAA said it had accepted 25 of the AAIB's recommendations and partly accepted the remaining six on which further detailed research was necessary.

Mr Christopher Tugendhat, chairman of the CAA, said his organisation had "moved quickly to improve safety standards" arising from the lessons of the Manchester crash.

"No time was lost in introducing new safety measures while waiting for publication of the report on the Manchester accident," he declared. Many measures already planned before the crash had been swiftly introduced.

Mr Tugendhat said that many of the AAIB's recommendations, while relevant to the Manchester accident, covered areas of work which had already been initiated by the authority as part of its continuing programme of safety improvements.

"The programme took longer than expected, but was internationally recognised as high-quality work in an essential safety area," the Department of Transport said yesterday.

"The end result is one of the most thorough and detailed reports ever written on an aircraft fire which will be of considerable value to the aviation industry. The AAIB has devoted £200,000 and over double the average time to this especially important investigation."

The CAA said areas which still required detailed research and international action included passenger smoke hoods, the development of cabin water-spray systems and the introduction of closed-circuit TV for flight-deck crews.

On smoke hoods, the CAA had developed a technical specification for industry and would review the position "when hoods were available which meet that specification and in the light of any alternative safety systems that might then be available." This could take another 18 months.

On cabin water sprays, tests were still being conducted at the Fire Services Training School at Teesside, in the north-east. Industry, meanwhile, was developing a "water spear" which could be fired into a cabin to pump in water.

The authority was conducting an investigation into the potential of closed circuit TV – "the initial results of which are encouraging."

February retail sales show record rise on eve of budget

By Ralph Atkins and Maggie Urry

THE UNCERTAIN economic backdrop to Chancellor Nigel Lawson's sixth budget later today was highlighted yesterday by official figures showing a record rise in retail sales last month.

The unexpectedly steep increase failed, however, to dampen confidence that the budget will buttress the Government's battle against inflation. Share prices closed at the highest level since the October 1987 stock market crash – building on rises through last week.

Equities were boosted by expectations of cautious and prudent budget changes. Share price rises in New York and continuing sterling strength added to confidence.

The FT-SE 100 share index closed 17.8 points higher at 2,103.0, breaching the psychologically important 2,100 barrier. The FT Ordinary index rose 14.5 points to 1739.4

The rise in retail sales reversed a big fall in January and conflicts with other evidence pointing to a slowdown in consumer spending from exceptional levels last year.

It suggests the deceleration will not be continuous and that interest rates will not be cut in the immediate future.

Other figures yesterday for the factory-gate prices of manufactured goods suggested cost pressures may be ebating slightly – providing some comfort to the Treasury which has pushed interest rates higher to slow economic growth and subdue inflation.

Mr Nigel Lawson would have seen the figures at the end of last week but is unlikely to have wanted to make more than cosmetic changes to today's speech. Budget documents were yesterday in advance stages of preparation at printers.

The Department of Trade and Industry (DTI) said retail sales volumes rose by a provisional 2.5 per cent in February after adjustment for normal seasonal variations.

Recent month's figures have moved erratically, possibly affected by cut-price sales being bought forward into December.

Figures for the three months to February, which give a guide to the underlying trend, show no increase compared with the previous three months.

Compared with the corresponding three months a year before, sales were 4 per cent higher – down from peaks of about 7 per cent last summer.

The Treasury said the picture continued to be one of a slowdown in consumer spending.

The trend in retail sales had shown little or no growth since last summer, it said.

Last week's Confederation of British Industry/Financial Times distributive trades survey showed retail sales growing in February at the slowest annual rate for at least five years.

City of London analysts had expected only a modest rise and described the increase as disappointing. However, they said the figures could be revised and did not reverse recent trends.

Retailers admitted to being puzzled by the official figure for retail sales in February. Most said that one figure should not be viewed in isolation.

IBA offers bidding plan for ITV rights

By Raymond Snoddy

THE Independent Broadcasting Authority, which oversees terrestrial British commercial television, has submitted proposals to the Government to award future commercial television franchises by a form of competitive tender ultimately involving highest bids.

The proposals, which differ from the position of the 16 television companies under the IBA's aegis, were submitted to Mr Douglas Hurd, the Home Secretary in response to the Government's recently published draft legislation on broadcasting.

The IBA, under chairman Mr George Russell, chief executive of Marley, the building products group, has tried to find a tender mechanism meeting the Government's requirement for an "objective" method of allocating broadcasting licences but which also protects quality programming.

The IBA proposal involves applicants submitting detailed business plans for the 10-year franchise.

Detailed costings would have to be given for all aspects of the business and for the expected ratings and advertising revenues programme schedules would earn.

The business plans would have to name senior programme executives. Any applicant applying as a publisher/contractor and intending to buy all programmes from the independent production sector would need to supply signed programme supply agreements.

The business plans would be assessed for both the quality of the programme ideas and the "quality of the money" by a panel of independent industry assessors.

Applicants would be asked to pay an annual lease for the franchise based on a valuation produced by the Independent Television Commission, the body set to replace the IBA, a merchant bank and representatives of the Treasury.

Applicants will also have been asked for a separate submission stating how much extra they would be prepared to pay for the franchise over the annual lease cost. These bids would be expressed in percentages of annual revenue.

The ITC could still disregard bids which were implausibly high or which made it unlikely that programme promises could be honoured.

The Authority calls for a two year moratorium on takeovers after the beginning of the new contracts on January 1 1993.

The draft broadcasting law says that the barriers to takeover of ITV companies under normal Stock Exchange rules should be removed.

The IBA is, however, prepared to tolerate non-hostile takeovers of ITV companies once the broadcasting bill becomes law next year if this is seen as necessary to strengthen the system ahead of the new franchise round.

Buy-out likely for craft skills agency

By Charles Leadbeater

THE SKILLS Training Agency, which runs a national network of 60 centres concentrating on manufacturing crafts, is to be privatised, probably through a management buy-out, Mr Norman Fowler, Employment Secretary, announced yesterday.

The move is part of a sweeping plan to transform Britain's training system by giving the private sector a larger role in setting priorities and delivering courses.

Mr Fowler last December launched an initiative to create about 100 employer-led Training and Enterprise Councils, intended to determine local training needs.

The STA, which employs about 3,000 staff, has broken even in only one of the last five years. It is projected to make a £20m loss this year. The skills centres were set up after the First World War to retrain servicemen. Last year, they trained about 110,000 people, at a cost of £75.8m.

Mr Fowler said that while the sale by tender would be open to any interested party, he intended to assist a management buy-out team led by Mr Stuart Bishell, the Agency's deputy chief executive.

The sale follows a review of the Agency's prospects by Deloitte, Haskins and Sells, the accountants, which found that despite over-capacity in about a third of the centres, mainly where unemployment has fallen sharply, the network could be developed into a viable business.

The move was sharply criticised by Mr Michael Meacher, Labour's employment spokesman, who predicted it would lead to the sale of under-utilised skills centres in the south-east.

About 80 per cent of the Agency's income comes from the Department of Employment's Training Agency. The STA's reliance on the Department was heavily criticised by a 1987 National Audit Office report, which found the Agency's courses cost more than Colleges of Further Education and were less successful in placing trainees in jobs.

Mr Bishell said improved marketing meant that by 1991 more than half the Agency's income would come from employers.

Ivor Owen adds: Rejecting Labour criticism of the decision to privatise the Agency, Mr Fowler insisted that "no change" was not an option. He said assistance to the buy-out team would be limited to the procurement of professional advice.

Minister offers proposals for Scottish legal reforms

By James Buxton, Scottish Correspondent

THE Government yesterday published proposals which could lead to sweeping changes in the working of the legal profession in Scotland, which is distinct from that of its southern neighbour.

The suggested changes mirror some of the Lord Chancellor's controversial proposals for England and Wales, but they received only restrained opposition from Scottish advocates and a guarded welcome from solicitors.

The Government suggests that solicitors should be allowed to practise in the supreme courts and that they could eventually become judges. It moots the idea of barristers being allowed to form partnerships among themselves and with solicitors, and raises the possibility of solicitors losing their monopoly on conveyancing.

It also suggests increased statutory control of the legal profession in Scotland, particularly if restrictive practices are to be allowed to continue. Greater powers are contemplated for the Lay Observer, the government officer who oversees solicitors.

The Government wants comments on the Scottish paper by June 13.

Mr Malcolm Rifkind, Scottish Secretary who presented the proposals, said they were aimed to widen consumer choice in legal services by removing unnecessary restrictive practices.

He was careful to underline the independence of the Scottish legal system and said that it had fewer restrictive practices than its English equivalent.

Scottish solicitors, for example, represent clients in court on more serious criminal and civil cases than they do south of the border.

UK NEWS

Canon seeks UK site for factory

By Hugo Dixon

CANON, the Japanese office automation group, is looking to the UK as the site for its next European factory. The plant would probably be used to manufacture the company's fast-selling laser-beam printers, which are used in conjunction with personal computers. However, it might also make facsimile machines.

Mr Takeshi Mitarai, president of Canon Europa, said yesterday that he wanted the new plant to be in the UK, because the company had no factories there.

Canon's existing European factories are in West Germany, France and Italy, where it has a joint venture making photocopiers with Olivetti.

Mr Mitarai said that no location in the UK had yet been chosen. The company would be looking for sites in Wales, Scotland and Northern Ireland, as well as closer to London.

Technical experts would be coming from Japan as soon as possible, Mr Mitarai said. The aim was to have the factory running within two years.

Canon at present makes laser-beam printers (LBPs) and facsimile machines for the European market at its French factory, which also makes part of its photocopier range. However, Mr Mitarai said this factory was becoming crowded with too many different products and there was a need to find a new production facility for the LBPs and possibly the facsimiles machines.

Canon's decision to build its fourth factory in Europe is the latest in a string of decisions by Japanese electronics companies to move production into the region.

The moves have been spurred on by the European Commission's programme to create a single European market by 1992. Japanese companies want to be regarded as insiders when Europe's internal trading barriers are dismantled.

Canon is the dominant supplier in the world's fast-growing laser-beam printer market. As well as selling machines under its own name, it makes LBP engines for many computer companies including Hewlett Packard of the US, Apple of the US, Siemens of West Germany and Olivetti.

Venture funds boost northern investment

By Charles Batchelor

BRITISH venture capital groups increased investments by 35 per cent to £1.39bn in 1988 and spent much more of their money in the north of the country and the Midlands.

Mr John Nash, chairman of the British Venture Capital Association, said yesterday that the rise in the volume of investments outside the south-east of England was encouraging, but a drop in the percentage of funds going to technology-related companies, from 16 per cent in 1987 to just 9 per cent last year, was not good news.

This fall in technology-related investments emphasised the concerns the association had about the number of new, innovative, wealth-creating companies which are currently being generated in the UK, Mr Nash added.

The association is examining how to find high-risk seed capital finance for small and technology-related projects and aims to find a solution to their difficulties within the next year.

The announcement of the investment patterns of venture capitalists comes a few days after Lord Young, Trade and Industry Secretary, criticised the venture capital organisations and banks for failing to invest enough in high technology businesses.

The 107 full members of the association, which represents most significant venture capital groups in Britain, made investments in 1,527 companies last year. The sums invested in the north and the Midlands doubled to £240m and £205m, respectively.

Investments in London and the south-east, traditionally the target for most venture capital spending, fell from 57 per cent of all spending in 1987 to 49 per cent last year.

Start-ups and other early stage investments accounted for 28 per cent of financings and for 10 per cent of the amount invested.

Clothing industry sees static exports

By Alice Rawsthorn

THE UK clothing industry saw static exports last year because of problems caused by the strength of sterling against European and North American currencies.

The industry, which has made progress in improving its export performance in recent years, saw its overseas sales remain stable at £1.7bn in 1988, according to the latest figures from the British Knitwear and Clothing Export Corporation.

Mr John Wilson, a director of the BKCEC, said that the strong pound was the only reason for the static state of exports. "Given the difficulties of selling to our overseas markets we were pleased to have held our ground during the year," he said.

North America, which absorbs about 11 per cent of UK clothing exports, was difficult throughout 1988 because of the combined effect of the weak dollar and strong pound.

Exports to the European Community, responsible for nearly half of all exports, stayed resilient in the opening months. But conditions in the European market became tougher in the second half as the pound strengthened.

Conversely, the UK clothing companies experienced buoyant demand in South-East Asia: especially from Japan, where the value of exports rose by over 30 per cent.

The UK clothing and knitwear industries sell about a quarter of their output overseas. The most successful exporters are those which concentrate on higher quality "traditionally British" products, such as Dawson International's luxury cashmere knitwear and Acquascutum's tailored clothing.

Last year the industry's export problems were worsened by a rapid rise in the influx of clothing imports into the UK. The increase in imports imposed intense pressure on profits.

University chair in work crime established

By Our Education Correspondent

THE FIRST university chair dedicated to preventing crime at work is to be set up at the Cranfield Institute of Technology with sponsorship from the Post Office.

Cranfield is also establishing what it claims to be the first full-time Master of Science course in crime risk management, aimed at managers whose job it is to prevent crime at work, whether by a employees or outsiders.

The initiative is aimed at cutting losses through crime, which are estimated to be more than £3bn a year, discounting unreported crimes.

It also follows an appeal last year by Mr Douglas Hurd, the Home Secretary, for businesses to become more involved in crime prevention. Mr Hurd welcomed the response to his appeal: "It is not often in this wicked world that a suggestion is picked up so effectively," he said.

The Post Office, which has had an official responsible for crime prevention since 1793 is donating £60,000 to the initial cost of the project.

Cranfield's first professor of crime prevention studies will be appointed in June and the first 20 MSc students will start work this autumn.

The course will be designed to suit the interests of the participants, but among the topics which Cranfield expects to cover are computer crime, credit fraud and retail crime. It may also cover financial services and markets based crime, such as insider dealing.

The MSc, lasting a year full-time and two years part-time, will cost £3,000 to £3,500 a year.

Teachers crisis equals trouble for reforms

David Thomas on an issue which could threaten government plans

MS ANN MASON, a headteacher in the east London borough of Tower Hamlets, has seen the opening of her spanking new Hermitage Wall primary school delayed from September because teachers are thin on the ground. At the last count, 118 of the 992 teaching posts in the borough's infant schools were vacant.

A few miles away, but light years distant in social terms, is Westminster School. Talk about teacher shortages has percolated through to one of England's great public schools. "There is detectable concern in the independent sector about the number and quality of applicants," says Mr David *Summerscale, headmaster.*

Ms Mason and Mr Summerscale both reflect, to quite different degrees, rising anxiety about the supply of teachers to Britain's schools. This was described last week as "the most important subject in education at the present time," by *Mr Timothy Raison, chairman* of the House of Commons education committee.

The committee is in the closing stages of investigating teacher supply. Every witness, bar those from the Department of Education and Science (DES), has talked of an *imminent crisis*. It will be surprising, therefore, if the committee does not add its voice to the recent warning by the independent schools' inspectorate.

Unless the country gets the supply of teachers right, delivery of the Government's education reforms would be in jeopardy. "*Without that, the rest fails*," the inspectors wrote.

For the first time since their pay dispute, teaching unions have an issue with which they can run. They believe the Government will eventually have to cough up more money for teachers' pay to avoid growing shortages.

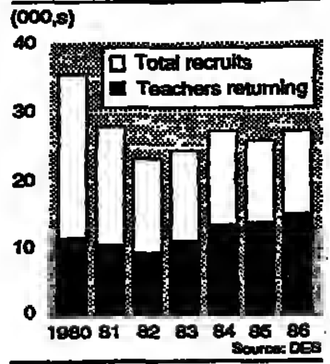
Yet ministers are almost certain to baulk at throwing money – every 1 per cent on the teachers' pay bill adds £75m to public spending – at a more complex problem than the scare stories make out.

Take retention, for example. Much is talked by teachers about hordes of colleagues quitting the classroom for lusher pastures elsewhere. In fact, less than 1 per cent of secondary teachers leave each year for other jobs.

This low wastage rate may reflect the lack of openings for someone who has spent much time in the classroom. But it also says something about *teachers' pay.*

From next month, the main grade for a classroom teacher will run from £8,394 to £14,694, with about half also receiving an incentive allowance ranging from £858 to £4,710, giving a maximum of £19,404.

Recruits to teaching



This may be a derisory graduate salary for someone bringing up a family in high cost areas of south-east England, but perhaps not so bad for a teacher in the north.

More worrying is the lack of new people coming into teaching. "Returners," mainly married women re-entering the profession, have become *increasingly* important to maintaining teacher numbers throughout the 1980s, indicating the problems of attracting new blood into teaching in a tight graduate labour market.

Even the DES, which has appeared complacent until recently, warned the Commons committee of widespread teacher shortages in maths, physics, chemistry, technology, modern languages and music by 1995.

The demographic roller-coster means not only that teaching will have to compete with other jobs for the favours of *the dwindling supply of* 18- to 20-year-olds in the early 1990s, but also that the battle will be at its most intense just as school rolls resume their upward climb.

The Government's response to these pressures is already clear in outline, if not in fine detail. *It consists of the following* main elements:

- Pay flexibility. The increase in the number and value of incentive allowances is designed to give schools greater freedom to reward teachers in shortage subjects or those of high ability.
- *Mature recruits.* The Government is planning to simplify the path into the profession of people in mid-career, partly by introducing a new system in which mature entrants would undergo training while earning a wage and serving a probationary period at school.
- Returners. Local authorities and the DES are beginning to think hard about the more *than 350,000 people* with teaching qualifications not currently in the profession.

It is too early to tell whether these measures will plug the shortages in the early 1990s. If not, expect a lot more pressure on teachers' pay.

MANAGEMENT: The Growing Business

The European single market

Beware an ostrich mentality

Charles Batchelor examines the opportunities and threats of 1992

A British building subcontractor recently lost a large amount of business when an important customer, a British property developer, started to operate in West Germany. Not only was the sub-contractor unable to tender for the work in Germany, the two German sub-contractors which were taken on successfully bid for the developer's UK business.

Another British company, a supplier of dustman's overalls to a local authority, faces the prospect of losing a lucrative contract. The local authority has learnt that an Italian company can supply the overalls 40 per cent cheaper.

Nineteen ninety-two, the date that has mesmerised businessmen throughout Europe and beyond since governments started to promote the idea of a single, barrier-free European market, is already throwing a long shadow over many corners of the continent's business community.

After the shock caused by the initial burst of promotional hype, many businessmen consoled themselves that the world would not change overnight on December 31 1992. Most are aware that it will take well into the 1990s for all the proposed changes to take effect. On the other hand, if 1992 is only shorthand for a gradual process, that process has already begun.

The problem for the smaller company, with its limited resources, has been to isolate the relevant detail in the welter of brochures and seminars.

"Often the single market seems to have little immediate relevance to the small business," John Parsons, a small firms representative on the British Overseas Trade Board, told a recent 1992 briefing at the American Chamber of Commerce (UK). "But the need for smaller firms to begin preparations now is every bit as urgent. Getting used to operating in the single market will often mean bigger psychological and practical changes than for larger businesses. Small firms often operate in specialised niches. They can be very vulnerable if their niche changes in any way."

Yet many growing companies have been displaying an ostrich-like head-in-the-sand mentality. Only 7 per cent of Britain's 50,000 small and medium-sized companies have been actively pursuing single market strategies, according to James Dudley, a High Wycombe-based management consultant.

Among responses from the businesspeople he polled were: We don't export so it doesn't concern us. We are already exporting to Europe. We are not interested in Europe as we have business in the US. We are a small regional company so we won't be affected.

A small minority of companies may escape 1992 unscathed but these comments ignore three crucial issues, Dudley points out. Foreign competitors may attempt to break into the passive company's home market; customers and suppliers may be adversely affected by changes in *their* industries and markets; and the small company could miss the chance to take up distributorships in its home market for foreign companies making complementary products.

So what should the growing business be doing to prepare for 1992?

● It should identify the key White Paper proposals and legislation which could affect its business. Small firms need to determine the objective of the proposal; the likely timing of its implementation; and assess whether it represents a threat or an opportunity, says Dick Porter, a partner of accountants Peat Marwick McLintock.

Marjorie Robson, managing director of Sykes Soft Drinks, an old-established family company with sales of £1m and 60 employees, has been following developments closely. Although her company only operates within a 25 mile radius of its base in Sunderland she keeps a close eye on the directives which come from Brussels.

She monitors any changes in the standards governing the contents of soft drinks and takes a keen interest in suggestions that non-returnable bottles might attract environmental taxes. This would give Sykes, which uses returnable bottles, a price advantage.

● The growing business should evaluate what its own competitive strengths and weaknesses are. Competitive advantage could be based on owning strong brand names, on having a strong distribution network or on dominating a particular market niche, says Peat Marwick's Porter.

Small and medium-sized companies may face a considerable threat from larger competitors with more resources but the smaller fry should be able to make use of their traditional strengths – their flexibility and their ability to offer a more personal service.

Brian J Clouston, a Durham-based firm of landscape architects, has exploited the high regard in which British landscape design is held abroad to break into new markets on the Continent over the past 18 months. "There are differences in soil and climate but Continental customers love the British style and approach," says Brian Clouston, chairman. Clouston employs 135 people and has turnover of £4.5m.

● The businessman should assess the *indirect* impact 1992 could have on his company. Reorganisations among Europe's larger companies will almost certainly have a knock-on effect on their smaller suppliers and customers.

● He should decide the best way to increase sales in Europe. For many growing companies 1992 is synonymous with the idea of exports. But, the experts warn, most companies should only contemplate exports when they have a solid base of domestic sales.

For most companies building overseas sales is a long-term process. Dell Quay Marine, a Poole, Dorset-based manufacturer of leisure craft, decided two years ago that it needed to refine its approach to the continental market. It already had a chain of dealers round Europe but found it was spreading its marketing effort too thinly. It resolved to target one market, Germany, where disposable income was high.

Dell Quay now has six dealers in Germany and sales are starting to increase. But the development of the German market was not without its problems. "Unquestionably we made mistakes," says Arthur Moseley, chairman and managing director.

Moseley put a lot of effort into convincing the dealers they had an attractive product but underestimated the need to sell their boats to the final customer.

With the boats languishing in the showrooms the Moseleys realised they would have to advertise them more widely. They also discovered that the German customer was not interested in buying a hull. He wanted a package including hull, outboard motor and trailer to tow his boat to the water. Dell Quay has now teamed up with the German engine manufacturers to offer just such a package.

Joint ventures like this are often the most economical way for the smaller company to develop new markets. Two-thirds of the companies polled in a recent Peat Marwick survey said they were considering cross-border links.

But reaching an agreement may require lengthy negotiations and the more lax reporting requirements on the Continent mean that the British partner is unlikely to obtain any significant financial information on his prospective partner until the discussions are well advanced.

● The growing business which wants to expand into Europe should take advice. With information on 1992 available almost on every street corner this suggestion may seem superfluous. But many companies still go abroad with an inadequate understanding of the pitfalls of employment law, distribution agreements and the local tax regime.

The Department of Trade and Industry (DTI) and the management consultants are keen to help. The DTI will help for free but does not go into the fine detail the businessman may need. The consultants may be able to provide specific advice but will charge for it. Chambers of commerce and trade associations can be useful sources of quite detailed information.

Many small businessmen are daunted by the prospect of planning ahead for three or four years because their time horizons are usually much shorter. But planning is essential not only to avoid the pitfalls of 1992 but to capitalise on its advantages.

One British manufacturer of electric radiators realised that the mutual acceptance of safety standards which will come into effect under the 1992 proposals would allow one of its Spanish competitors to break into the UK market. It responded by redesigning its own radiators to meet the present Spanish standard and is now competitive in both the Spanish and British markets.

Contact: DTI 1992 Hotline Tel 01-200 1992. European Community Business Information Centres are in London Tel 01-730 8451, Glasgow 041-221 0999, Birmingham 021-454 6171 and Newcastle upon Tyne 091-261 0086.

Alan Harper

Arthur Moseley: German customers wanted a complete package — not just a boat

Independence is the main motivator for entrepreneurs

What constitutes success for the smaller business owner? It is certainly not as simple as the traditional view that a successful company is one with high profits and a growing workforce. Among entrepreneurs, opinion is as diverse as the numbers in their ranks.

One electrical engineering business in Yorkshire declined from a peak of eight employees to just one person, the 75-year old manager. He decided that the problems of employing more people would be too much so when employees left or retired they were not replaced. But far from being a failure this company gives its manager satisfaction, a small profit and the chance to spend time at his holiday cottage in Wales after visiting local customers.

Another Yorkshire engineering company, by contrast, grew rapidly after being set up in the early 1960s and now employs 300 people. Established originally to make flashing hazard beacons to illuminate roadworks, the company went on to develop new markets and a whole range of electronic products.

The beacon manufacturer may conform to the conventional view of what constitutes business success but the ambitions of its owner are shared by only a minority of small business founders, according to a study* of 61 electrical engineering businesses in Yorkshire.

Only 8 per cent of entrepreneurs interviewed put financial ambition as a motivating factor when they started out. An even smaller number – just 5 per cent – stated that they were currently striving to become financially successful.

The importance of these findings is that identifying those factors which make a small business successful allows the organisations which assist them to be more selective about which to help. Advice agencies would be better equipped to promote those factors which contribute to success.

Many businesses also questioned the desirability of increasing the size of their workforces. Only 12 per cent wanted their companies to expand to a level of more than 200 employees (the usually adopted upper threshold for "small" businesses).

Three-quarters of those interviewed had a more limited desire for growth. Their ideal average company size was 27 employees. Many owners and directors believed that this was the optimum size beyond which they would have to delegate managerial responsibility for major areas of the company's operations.

Indeed, this latter factor points to the principal motivating force for entrepreneurs: the desire for independence. Eighty-seven per cent of owner managers cited independence and job satisfaction as the major benefits of managing a small business.

For some entrepreneurs success is the satisfaction they derive from making a product (this group includes skilled craftspeople and artists); for others it comes with developing new products; and for groups of workers, such as members of co-operatives and community businesses, success is the achievement of alternative goals through different organisational structures.

But if there is little agreement as to what constitutes success, there is a greater consensus of view in respect of the way goals can be achieved. Indeed, there are remarkable similarities between both entrepreneurs and business advisers on this front, regardless of their differing criteria for success, the book states.

The two groups present their advice from slightly different viewpoints, though. Entrepreneurs, having been personally involved in the successful development of their business, generally have a very practical view of the problems and opportunities involved in developing a business. Their tips and advice for success are thus practically orientated. Advisers, having seen perhaps thousands of businesses, have a wider experience but lack depth of practical knowledge. Consequently, they tend to give more factually based advice, often based on the broader generalities of developing a business.

The main similarities between entrepreneurs and advisers concern the importance of planning and marketing in developing a company. To maintain or improve a company's position, market research and monitoring are important. This will identify opportunities and threats, allowing the business to respond to changes in the market or take advantage of gaps in the market.

However, the main issue which advisers note and entrepreneurs fail to mention concerns risks and risk minimisation. Advisers are aware of the high failure rate among small businesses, while failure is perhaps something which the average business puts well into the background.

Two factors which successful entrepreneurs view as important are a loyal workforce and hard work. In contrast, advisers did not mention these two points, the book says. Finally, the one thing which all the entrepreneurs cited, but which only one adviser interviewed mentioned, was luck. Some believed that luck could play a part in success.

Many commentators, meanwhile, were of the opinion that if a well-developed business strategy can be established using planning, marketing, hard work and a loyal workforce, the business should develop a natural capacity to find and exploit business opportunities and make its own luck.

**Small Business Success by Paul Foley and Howard Green. Paul Chapman Publishing, 116 pages. £12.95.*

Charles Batchelor

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FT LAW REPORTS

No VAT refund for developer

NEUVALE LTD AND ANOTHER v COMMISSIONERS OF CUSTOMS AND EXCISE

Court of Appeal (Lord Donaldson, Master of the Rolls, Lord Justice Mustill and Lord Justice Stuart-Smith): February 23 1989

A person registered for value added tax cannot set off input tax against future exempt outputs, in that under pre-1987 as well as present legislation, he can claim credit for input tax only so far as it is attributable to his taxable supplies.

The Court of Appeal so held when dismissing an appeal by two subsidiary companies, Neuvale Ltd and Frambeck Ltd, from the decision of VAT tribunal chairman, Lord Grantchester, that they could not recover input tax paid in respect of business activities conducted in preparation for the future provision of non-taxable supplies.

LORD JUSTICE MUSTILL said that six years ago Mr Douglas Hampson conceived the idea of developing an area of Battersea for two purposes: the letting of individual storage units in a partitioned warehouse, and the conversion of existing buildings into office and light engineering accommodation.

He acquired a company named Public Storage Ltd, which purchased the site and converted the warehouse. Development of the other buildings was carried out by two wholly-owned subsidiaries to whom Public Storage sold part of the site.

Each of the subsidiaries agreed with Public Storage that they would make Mr Hampson's services available to it so that he could work on the storage business, in consideration of quarterly payments. They had to account for output tax on those payments for VAT purposes.

Thus the supplies of goods and services by and to the subsidiaries were of three kinds: (i)the supply by them of Mr Hampson's services, attracting output tax; (ii)the supply by them of rented accommodation, which was exempt tax; and (iii)the supply to them of goods and services accountable for input tax, solely concerned with preparation of the buildings for rental.

By the time the subsidiaries were thoroughly established, services in all three categories were rendered by and to them, and there was no question about how their input tax should be set against output tax.

In the early stages, however, there were only two types of supply - Mr Hampson's output services, and the input of goods and services for development of the buildings. The output rentals had not yet begun.

The question was whether the input tax could be set off against the output tax on the future unrelated services.

Section 15(1) of the Value Added Tax Act 1983 provided that to determine the amount of input tax for which a taxable person was entitled to credit at the end of any period, "(a)if his business is such that all his supplies are taxable supplies, there is allowable the whole of the input tax for the period; (b)if it is such that some but not all of his supplies are taxable supplies, there is allowable such proportion of the input tax for the period as... is attributable to taxable supplies...(c)..."

On the literal wording of the subsection, the subsidiaries had a strong argument for saying that (a) was applicable. Each subsidiary could say that for the relevant accounting period "his business" was such that "all his supplies" were taxable supplies, and there was therefore no room for apportionment.

The commissioners replied that that result was absurd. They said section 15(1)(a) should be interpreted as if the material part read "there is allowable the whole of the input tax for the period so far as attributable to those taxable supplies".

The subsidiaries pointed out that the omission of reference to apportionment in paragraph (a) could not have been an oversight, since each of the immediately following paragraphs expressly provided for apportionment.

They argued that what the commissioners were seeking to achieve by its interpretation of the 1983 Act was not actually done until the Act was amended by the Finance Act 1987, to give credit for input tax against taxable supplies only, and to put the legislation in line with the EC Directive of May 17 1977 (the Sixth Directive) [which provided that a taxpayer could deduct vat paid on supplies to him, "insofar as the goods and services are used for the purposes of his taxable transactions"].

The subsidiaries' rights were governed by the 1983 Act, not the 1987 Act.

The proper interpretation of the 1983 Act was, however, given a quite fresh perspective by the decisions of the Court of Appeal and the House of Lords in *Apple and Pear Development Council v Customs and Excise Commissioners* [1986] STC 192.

In that case the taxpayer Council had two distinct output activities, one of which involved taxable supplies.

The problem was to decide whether the Council's business was such that all its supplies were taxable, or whether some but not all were taxable thus demanding apportionment under the equivalent of section 15(1)(b) (see section 4, Finance Act 1972 as amended by Finance Act 1977).

The Court of Appeal adopted the commissioners' argument that there should be apportionment.

Lord Justice Fox said that what the statute contemplated was that inputs acquired for the purposes of making taxable supplies were to be available as credits. It was a balancing of input tax in respect of an activity against the output tax in respect of that activity. If only some supplies were taxable, the taxpayer was only allowed the due proportion of his inputs. Section 15(1)(a) was dealing only with the case of a person whose activity was directed to the making of taxable supplies.

He said "Neither the structure of the Act, nor the provisions...nor the practical consequences, lead one to suppose that it can have been intended that section 15(1)(a) should operate to entitle a taxpayer who conducts an activity in which he neither makes nor intends to make taxable supplies, to be given credit for input tax incurred in the conduct of that activity".

Accordingly, he said, where a person conducted two activities and only intended to make taxable supplies on one "for value added tax purposes the two activities must be separately regarded".

The House of Lords expressed a concluded view to the same effect.

Lord Brightman said the scheme of the legislation was plain. If the taxpayer's business activities were such that all his supplies were subject to output tax, he recovered all the tax which he had paid on the inputs of that business. If all his supplies were exempt, he could recover none. If supplies were partly taxable and partly exempt, tax was apportioned and the tax attributable to exempt supplies was not recoverable.

He asked "how, against that background, could one rationally come to the conclusion that if the business activities...are such that some services are taxable supplies and some are not supplies at all, the whole of the input tax is recoverable?"

He said that the sense of the Sixth Directive was that input tax was not deductible except so far as the goods or services on which tax had been levied were for the purpose of taxable transactions. The court was required to construe the legislation in the light of that directive.

In setting out his reasons for his decision in the present case, the Chairman of the VAT tribunal quoted extensively from Lord Justice Fox and Lord Brightman.

He said they had established the principle that "business" for the purposes of section 15(1) meant a business activity involving making taxable supplies, and that tax paid on a supply for a business activity which did not involve making taxable supplies was not deductible as input tax.

"Thus," he said, "tax paid on a supply for the purpose of a business activity which involves only the making of exempt supplies is not deductible as input tax".

The exposition of the legislation in *Apple and Pear* was not simply a background to the decision of a particular problem. It formed an indispensable series of links in the reasoning which led to the decision, and it formed part of the *ratio decidendi* and was binding on the present court.

The tribunal chairman was right in his analysis of the law, and right in his conclusion. The appeal should be dismissed.

Lord Donaldson MR and Lord Justice Stuart-Smith agreed.

For the subsidiaries: Frederic Reynold QC and Anthony Closer (BH Mainprice).
For the Crown: Michael Beloff QC and John Laws (solicitor, Customs and Excise).

Rachel Davies
Barrister

TECHNOLOGY

"But the age of chivalry is gone. That of sophisters, economists and calculators has succeeded; and the glory of Europe is extinguished for ever." Edmund Burke (1729-97)

Why forecasters keep their fingers crossed

Ralph Atkins delves into the UK Treasury's computer model and explains its imperfections

In the bowels of Her Majesty's Treasury, the official computer model of the economy, if not in disgrace, can hardly claim to have had a glorious year.

Treasury forecasts for 1988 fell far short of the mark, underestimating almost every important indicator – inflation, economic growth, investment and the trade deficit. Today Nigel Lawson, the UK Chancellor, will be hoping for an improved performance as he unveils his projections for 1989 and 1990.

In an age of sophistication, forecasts have become dependent on thousands of calculations, equations, endogenous (from inside the model) and exogenous (determined outside it) variables, identities (pseudo or real) and logarithms galore. There is an element of human fudge in forecasts, but the computers do the groundwork. The problem is that the predictions are still seldom right.

Unlike say physicists, economists appear unable to use computers with any precision. The difficulties are twofold:

● First, big industrial economies have proved too complex for economists to understand completely. Even relatively straightforward questions, such as what determines how much consumers spend in shops, are matters of much debate.

Frequently, different sectors of the economy interact in an unpredictable fashion. And responses to changes or shocks (perhaps caused by events elsewhere in the world) are subject to time lags of indeterminate length. If economists cannot agree about how an economy works, it is hardly surprising that attempts to model it on computers are imperfect.

● Second, the information is poor. UK economic statistics are notorious for their inaccuracy. Figures for the growth of gross domestic product last year, in particular, have been subject to ridicule as the various measures available have told different stories.

Monthly data are often revised and changes in trends are rarely spotted until two or three months later.

The solution adopted by the Treasury, and other forecasting groups, is to use computer models as a starting point but to treat the results with scepticism. Raw output is adjusted, until it looks both reasonable and in line with Treasury expectations.

This is not as sinister as it sounds. No economist would accept computer forecasts at face value given the inherent imprecision. The danger is of letting political considerations, or naked optimism, cloud decisions. If there were a code of ethics for economists, rule number one would be something like: "don't change results without justification."

The evidence is that the Treasury is fairly chivalrous. It has its reputation to protect and fanciful forecasts would erode its credibility. But it is not above suspicion. In particular its optimism about an improvement in Britain's trade deficit has been questioned.

Neil MacKinnon, senior economist at Chase Investment Bank, used to work on inflation forecasts at the Treasury. He says: "There is a large judgmental impact. They don't accept the results of the computer blindly –. which is probably not a bad thing."

He adds that in the Chancellor's Autumn Statement, published in November, the current account "stood out like a sore thumb."

The Treasury computer model dates from the early 1970s and has evolved with the help of technology. The latest version – called the slimline model – is smaller than its predecessor but still has about 500 variables.

It is run on an IBM 4381 mainframe sited in Treasury offices in Whitehall and operated by about 25 people. The mainframe is not a prerequisite, the software can be adapted to run on a desk-top computer.

Under the 1975 Industry Act, the Government is required to publish its forecasts twice a year. This it does with apparent reluctance – and unemployment forecasts are never released.

Still more embarrassing for the Chancellor, the computer model has to be made available to outsiders. One user is the Independent Treasury Economic Modelling Club (Item) sponsored by Ernst & Whinney. It has the enviable privilege of being able to play Chancellor with the same tools as Nigel Lawson himself.

Item operates the model on a Compaq Deskpro 386/20, a desk-top computer which, with laser printer and disk drives, is worth about £8,000. The version of the model it uses has been adapted by Oxford Economic Forecasting.

The program employs the same equations and data as those used by the Treasury, but Item has to make its own assumptions about the exchange rate and world trade. It also has to input its own residuals – biases introduced so that equations in the model are consistent with what has happened in the past. This means that its forecasts are not exactly in line with those of the Treasury.

Item produces forecasts for the UK economy. It is, for example, projecting large current account deficits well into the 1990s.

It can also run simulations to assess the impact of policy changes. For instance, Item can estimate the forecasts available to the Chancellor if he announces a 1p cut in the basic rate of income tax, costing £1.4bn. The results show that it would have an expansionary effect on the economy, increasing gross domestic product by 0.2 per cent next year.

It would also be good for the unemployed – cutting the jobless total by as much as 70,000 in 1990. Less welcome, it would encourage consumer spending and add £500m to the current account deficit.

But there is a limit to how far the model will stretch. Brian Pearce, Item's economic adviser, says: "If you are making changes to exogenous variables, the lesson is not to change them beyond their historical values."

It would be foolhardy to expect reasonable results from, say, a simulation of the effects of a 10p cut in income tax or a five percentage point fall in interest rates. But this lack of flexibility can cause problems when there is a shock change in a variable, such as the big oil price rises of the 1970s.

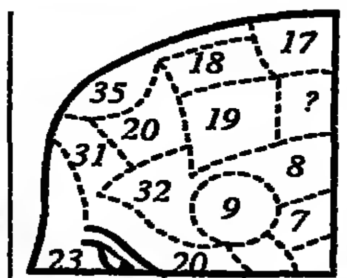
Pearce says that computer models enforce consistency in economic forecasting. They make sure that projections for inflation are not incompatible with, say, growth forecasts. This means unwelcome or surprising results should not simply be adjusted away. "If something is odd then we go back and see if I have made a mistake. But if we just don't like it, then that's tough."

The effort required for computer forecasting makes it unattractive to other economic pundits more concerned with shorter term considerations. In the City, the emphasis is more on predicting what next month's trade figures will show rather than on how growth will slow in the next two or three years.

Economic models are not widespread at securities houses and their use tends to be confined to longer-term analysis or simulating the effects of particular scenarios.

City economists rely more on spread-sheets to project trends forward and take account of special factors in particular months. When forecasting a year ahead, the performance of City analysts is on a par with that of the Treasury. At least, they are all more or less equally wrong.

Kevin Gardiner, UK economist at Warburg Securities, believes that forecasting trade figures is a hazardous business. He says: "You know what you think the bottom line is over the year as a whole and then you look at the most recent month's numbers and whether you expect things to diverge. You add in any special factors, do a lot of rounding and cross your fingers."



WORTH WATCHING

Edited by Geoffrey Charlish

Packaging that avoids litter

BATTELLE, the US-based international research organisation, has developed at its Frankfurt laboratory a new material which it claims is completely biodegradable.

The material is based on starch but so far has not been named. It is designed for packaging which is meant to be disposed of after use. When made of the usual plastics, these boxes and blister packs often become permanent litter, eventually being washed up on sea shores or remaining in landfill sites indefinitely.

Battelle says that the new material has "extremely promising" properties. It is transparent, flexible and can be injection moulded, extruded, blow moulded and turned into foil.

The new packaging would have no environmental effect. It resists breakdown under normal dry conditions, but in water or wet soil, micro-organisms degrade it within days to carbon dioxide and water. The first production experiments were successful and various samples have been fabricated. Additives make the material easy to process.

The laboratory believes that it will be one or two years before the production technology is ready for industrial application and it is seeking partners. The total cost of further development is estimated at between DM1m and DM2m (£625,000).

Access by signature

A SYSTEM providing access to anything from a bank account to a computer system, using a plastic card and electronic signature verification, is proposed by UK companies McCorquodale Security Cards, of Reigate, and Alan Leibert Associates, of Pinner.

The signature verification pad is supplied by Signify, of Irvine, Texas, a company 80 per cent owned by McCorquodale's parent Norton Opax, and 20 per cent by Alan Leibert Associates, which markets the unit.

Under the surface of the pad, a grid of crossing wires is able to sense the position of a special stylus. A tiny energised coil in its tip induces a current into the nearest pair of crossing wires, giving the position.

If the stylus is raised from the surface, this too is measured through the weakening induced current. The signature is tracked and recorded digitally, along with off-paper flourishes and timings of the various elements.

A sample signature produces a "template" in a digital storage system with which future signings can be compared. The template covers 13 aspects of the signature, including the angle at which the pen is held.

The personal identity number (PIN) can be dispensed with. In its place would be the holder's signature recorded in the magnetic stripe of a plastic card. When the card is presented, what is on the stripe is compared with what the presenter writes on the pad.

A mismatch, indicating fraudulent use, can be detected on 999 occasions in 1,000, it is claimed.

The technology can also be used with a "smart" card, that is, one with its own chip and memory. This facilitates more subtle checks, allowing access at particular levels to computer systems, for example.

Mains way to send TV signals

A NEW means of distributing television signals around premises, using mains wiring, avoids the disruptive and often expensive process of laying coaxial cable.

The system, marketed by International Media Communications of London, is called Metrovision and was developed by another UK company, KEE of London. A digital encoder unit takes signals from a video cassette recorder's output socket over a length of coaxial cable. These could be off air or from a tape, in the usual way.

The encoder plugs into the mains and transmits the signals as digitised video on a radio frequency carrier. In another room, a decoder, plugged into the mains, produces the corresponding UHF television signal which is cable-fed into the aerial socket of a television set.

The small decoder box has an infrared receiving "eye". The video recorder's hand-held controller can be pointed at it to change channels and control the recorder, as if it were in the same room.

To achieve this, the controller's signals are sent back down the mains to the room with the recorder, where they are turned back into infrared radiation by the encoding box. The box has an infrared transmitter window that is pointing at the recorder's receiving window.

Aid for staff in distress

AN ALARM system that tracks the location of staff members or occupants who are at risk has been developed by Tele-Nova, the London radio communications specialist. It is particularly suitable for premises where attack, accidental injury or illness could produce dangerous situations.

Known as Telenex, the system has ceiling-mounted ultrasonic detectors connected to a central monitoring screen. A unit worn by personnel can emit ultrasonic energy and a radio signal. The former enables location to be determined by the ceiling units, while the latter carries an identification signal which is picked up at a central point.

The personal unit is activated with a pull cord, or it will start up if the wearer falls or is forced to the ground. Attempts by intruders to wrench off the unit produce a similar result.

On the central screen, the alarm location is shown by a flashing point on a map of the premises, accompanied by a text message.

CONTACTS: Battelle Europe: London, 493 0184. Norton Opax: UK, 0256 465811. Alan Leibert Associates: London, 429 3344. International Media Communications: London, 629 6006. Tele-Nova: London, 692 9616.

ARTS

Duke Bluebeard's Castle

BBC2/RADIO 3

On Sunday, the BBC'e televised-opera-with-stereo was for once a snare and a delusion. The radio-only andience was luckier: the psychological life of Bartók's perfect one-act drama is all in the score, and it was brilliantly realised here by the London Philharmonic under Adam Fischer, with a definitive Bluebeard by the bass Robert Lloyd and a brave, nervy Judith, his latest and last hride, from Elizabeth Laurence. It was the televisualisation that queered the pitch.

The producer Leslie Megahey has excelled in period-handsome enigmas, *Schalken the Painter* and still better *Cariani and the Courtesans*, which made their mark by "painterly" effects and teasing finesse. The enigmatic *Bluebeard*, with its ancient, crepuscular castle and the strange sights behind its seven forbidden doors, must have seemed just his meat – despite the fact that its schematic text by Balázs asks for no visual realism whatever, but only suggestive streams of light. After all, the Hungarian State Opera's faithfully austere treatment (just seen at Covent Garden) is already paling in some old memories against Wendy Toye's sumptuously detailed version for Sadler's Wells 30 years ago.

Whereas Miss Toye's stage-pictures were true to the story, however, Megahey's were not, and he achieved a remarkable own-goal. Given an opera which depends upon a crucial twist in the old Bluebeard tale – originally mere Grand Guignol, transformed by Balázs into a deep psychological fable – he managed to untwist it back into Grand Guignol again.

I read the Balázs fable thus (with apologies, for in a good performance *Bluebeard* resonates beyond any "reading"): – Judith is young, and Bluebeard is not. At dead of night she has fled her honest, devoted family for him (here, she arrived in a designer gown and prowled languidly like Delphine Seyrig in *Marienbad*); now she wants to know him completely, because she loves him, and demands the keys to all his doors. Each reveals an aspect of Bluebeard and the life he has already made. She takes the torture-chamber and the daunting armoury in her stride, rejoices in his treasure-store and his romantic secret garden, begins to quail at the vistas of his magnificent realm and then the stagnant lake of his old griefs.

The crucial twist comes with the last door. Judith is quite prepared to find slaughtered past wives, but is horrified to discover beautiful, living ones – just as alive in Bluebeard's memory as she is: suddenly, instead of being the light of his life, she is only the final gleam, the last chapter. In the Balázs fable they robe and crown her with tender ceremony – against her protests (too late: she's insisted upon knowing too much) – while Bluebeard hymns each of them in turn, and they draw her away with them as he resigns himself to lonely gloom forever.

In Megahey's version, contrary to text and music alike, the torture-chamber that represents Bluebeard's remorseless drive was a cold mortuary, his armoury and his treasury mere museums, the magical garden a crypt and his glorious realm a steaming chunk of one of Jupiter's least-favoured moons – minuscule, bleak and barren (Judith had to pretend to be impressed). Far from enjoying perpetual life, the past wives were fettered in niches, as good as dead (one had a ghastly jewelled mouth and eyes), leaving Bluebeard himself to force Judith into her allotted cage in that meat-museum. In short, we wsre returned to the old Grand Guignol shocker with a few trendy kinks.

Against those odds Lloyd's uoble performance rescued much of the humane pessimism of the opera, and I should trust Fischer with the score anywhere. Miss Laurence needs only to remember that even Judith's most overwrought passages tell better at exact pitch, and not to rush her repeated "Give me keys to all your doorways!" – which should have the ritual effect of a fairy-tale formula. Such details matter, in a myth-opera which in our century has only Stravinsky's *Oedipus* as a serious competitor. It was sad to think that this shrunken, bedizened versiou of *Bluebeard* may well be seen by more people than have ever experienced the discomfiting real thing on stage.

David Murray

Handel and Janacek

ROYAL NORTHERN COLLEGE OF MUSIC, MANCHESTER

The spring operatic offerings in the Opera Theatre of the Royal Northern College of Music are two remarkable performances of two masterpieces outside the mainstream – Handsl's *Alcina* and Janacek's *From the House of the Dead*. Current standards of teaching and training at the college are svidently high indeed: the confidence and polish of both productions were constant qualities, and for the two very different operatic styles being explored – Handel's opera seria and Janacek's telescoped verismo – the security of the orchestral playing provided a rock-solid basis. These were expertly prepared *performances* they were also fresh, exciting, and sharply focused.

Alcina is for many Handelians ths supreme example of his theatrical genius, a work of sensual enchantment, emotional richness, and limitless sympathy for the romantic frailties of all its characters. Even so it must count as the more difficult undertaking for students, since it was written, as were all Handel'e great theatre works, for the virtuoso singers of the day, and presumes a level of vocal attainment not normally to be counted on in students.

The presence at the college of a marvellously talented young lyric soprano, Amanda Roocroft, must originally have brought the great title role into view, since a voice of such lustre and fullness throughout its compass and a stage presence of equal authority are made for the most taxing leading roles. (She must pay greater attention to verbal projection.) But the strengths of the performance weut beyond the leading lady. There were attractive accounts of the *primo uomo* role, the bewitched knight Ruggiero, from Deidre Elliott and the secondary enchantress Morgana, from Sally Harrison, and even more sharply profiled contributions from Gail Pearson as the boy Oberto and the bass Pavlo Hunka as Melisso.

Under Richard Vardigans's baton a direct connection was mads hetwesn vocal accomplishment and dramatic momentum: the long opera had heen trimmed much less than usual, but because there was obvious care over the delivery of the Italian text, the temperature of the production (a slightly vulgar, immensely skilful staging by Jamie Hayes full of lighting tricks and husiness with props) very seldom allowed to drop.

One came out of the theatre walking on air, the way one always should (but sometimes does not) after a Handel opera performance. After Janacek's harrowing yet endlessly compassionate opera the feeling was, in fact, not dissimilar. The RNCM male opera studeuts threw themselves into it body and soul – it's not unexpected that young performers should commit themselves to a stark 20th-century prison drama this way, but that did not reduce one's admiration for ths current of dramatic electricity that ran through the three short acts.

If anything, Stefan Janski's updated production, set amid monitor screens and brutalised concrete and steel partitions, relied too much on physical energy. The structure of the opera throws into high relief passages of becalmed, painful reminisceuce by a single character, but even there the accompanying physical hrutality was unabated, and after a while the impression of restlessness worked slightly to the detriment of Janacek'a peculiar dramatic economy.

But the power of the music always compensated. The excellent acoustics of ths RNCM theatre allow a much better balance than Janacek performances often achieve between pit and stage; the conductor, Ole Schmidt, was able to give ths heart-piercing orchestral stridencies full cry without swamping the voices. Words could always be heard – which made the use of the original Czech (delivered with care but little idiomatic authority by most of the cast) and, horror of horrors, surtitles in a student opsratic production doubly misguided.

Here was an opportunity, if ever there was oue, for communicatiou in the language of singers and hearers alike. The strength of the performers' involvement survived the audience's split attention, but this seemed to me a bad decision on the part of the RNCM, and a blot on an otherwise outstanding little opera season.

Max Loppert

"Pears in leaf:" a charcoal print by John Stewart, 1976

The art of the lens

William Packer reviews photography exhibitions at the V&A and the Lucy B. Campbell Gallery

Can the photograph ever be a true work of art? Photography has been a common place of gallery, saleroom and museum these 20 years, and yet the old debate still rumbles on. This year it is likely to rumble with a renewed vigour, for this is the 150th anniversary of the first demonstrations, in France and Britain, of that mechanical, magical process and principle. *Photography Now*, at the Victoria and Albert Museum (until April 30: sponsored by Agfa-Gevaert), organised by the curator of photographs, Mark Haworth-Booth, affords as good an opportunity as any to try to clarify the issue.

Of all the media of visual expression, photography is the most immediate and accessible. It is also ths most seductive and deceptive. Anyone capable of peering through the viewfinder to some imaginative purpose, and pressing the button with critical decision, may aspire to authentic creativity. The substantial achievement, of course, is another matter, hut it is this universal and practical accessibility that presents the problem.

There is with painting and sculpture the manifest test of technical skill; hence the distrust of so much of modern art for its deceptive simplicity. But with photography, where can the line be drawn between the artist-professional and the conscientious amateur? And so the temptation follows to define and qualify what art can and cannot be, and disqualify photography on technical grounds for being essentially mechanical or chemical, or arbitrary or momentary, all of which is to miss the point.

The camera is only a tool. Artists make art, and there are no rules of limitation as to what they may use. If a true artist picks up a camera and brings his creative faculties to bear on how he uses it, there is no logical reason why what he then produces should uot be art.

Artists have known all this all along and, from the earliest days of photography, have been turning the camera and its products to its own purposes whether as reference, stimulus or end in itself. It is a current use of the photograph, both as integral to the work or art and as the work of art itself, that is the premise of Haworth-Booth'a exhibition, which hrings together the work of sculptors, performance and conceptual artists besides photographers pure and simple.

The curious and perhaps unanticipated effect is to show that the more direct and straightforward the engagemeut with photography, whether its subject is the figure or the landscape, or the purpose documentary and objective or personal or self-involved, the more profound the imaginative experience it affords. Where the sculptor, Helen Chadwick's environmental installatiou seems merely pretentious and contrived, Cindy Sherman's large self-portraits, no less self-conscious, are relieved by an ironical and disarming wit. William Wegman's immaculate technique and direct, disinterested approach to his subjects, make his portraits of his dog and friends the more disconcertingly bizarre. Robert Mapplethorpe, no less immaculate, seems in contrast obvious, ponderous and arch.

Lee Friedlander is represented by two topographical sequences, one a documentary study of small town mid-America, the other and more extraordinary, an essay on blossom time in the temple gardens of Japan, at once consciously arty in its studied mannerism and ravishingly successful. Frank Gohlke's magisterial landscapes around Mount St Helens shortly after the great eruption of 1981 are not least remarkable for their odd assonance with Sebastiao Salgado's hellish vision of the Serra Pelado gold workings in Brazil, in which a slave army of prospectors swarms over the great pit.

And there is Nicholas Nixon, who, since 1975, has taken a group portrait of his wife and here three sisters once every year and always in the same order from left to right. Here is the entire sequence, a quiet, poignant and intriguing history in personal relations and growing old together that grows curiouser and curiouser the more we consider it.

★

Apart from the Collett Dickenson Pearce advertising campaign for Benson and Hedges cigarettes, there is no still life as such in this show, which omission is splendidly repaired by John Stewart's solo exhibition at the Lucy B. Campbell Gallery (80 Holland Park Avenue, W11: until March 23). Stewart is an Englishman who spends much of his time in France, where he finds his visual material, though it might be no more than a bowl of fruit, old tools worn with use and long discarded, a loaf of bread, bottles on a shelf, a jug, a broken box.

The images are simple, even severe in their formal, frontal disposition, each object isolated, to he savoured for itself alone. As much is true of the few portraits he is showing, with each sitter seen close and calm and self-possessed. The images are printed fairly large and their particular quality is remarkable both in the intensity of the realisation and in the physical presence on the surface, as though more drawn than printed through a negative.

Stewart is deeply committed to the rare process of the charcoal print, which he can only command in France in the studio of Michel Fresson, who carries on a long family tradition in the technique. All we are told of it is that gelatin rendered light sensitive retains pure pigment in exact proportion to the amount of light it receives. After a long exposure the surplus gelatin must be teased from the surface by being pelted with a mixture of sawdust and water. The mystery remains and perhaps it is best we should be little the wiser. Technique is only technique after all. What the artist makes of it is what matters, and John Stewart is indeed an artist.

Yevgeny Svetlanov

FESTIVAL HALL

A typical safe Sunday night programme was given by the Philharmonia under the direction of Yevgeny Svetlanov, and with piano soloist Yevgeny Mogilevsky, writes Paul Driver. The concert went off fairly well, but never generated electricity; while whenever there were quiet moments in the pieces, the typical safe Sunday night audience indicated its basic boredom by coughing in well-orchestrated bouts.

The concert began with a stylish performance of Beethoven'e *Egmont* overture, a piece whose logical thrust and flow of ideas never cease to amaze. Svetlanov is a dapper conductor to watch, but a deeply musical one to listen to; his baton-less hands are endlessly expressive, and he dispenses with flamboyance of gesture. The orchestra seemed to respond vivaciously to him, throughout the evening.

The account of the concerto, Beethoven's third, was disappointing. Mogilevsky had nothing new to say about this wearyingly familiar work, nor did he avoid a good deal of nervous scrambling of passages. In the first movement he inartistically prolonged the final trill of his cadenza to encceed in throwing the beguiling orchestral coda structurally off-balance. His manner in the second movement was unattractively forceful, his tone without scintillation. He came into his own in the finale, confidently and nimbly despatched, hut eveu here there was nothing in his reading to make one sit up.

The Shostakovich symphony was played with accuracy and verve. The double-bassee achieved some unforgettably searing *sforzato* quavers accompanying the cellos in a particularly intense passage of the slow third movemeut, which was altogether impressive and moving, until the audience joined in.

Only a born showman could conduct like this. With his hands motionless by his side and just a nod of the head towards the brass, Yevgeny Svetlanov led the Philharmonia Orchestra through a blazing performance of the last pages of the march in Chaikovsky's Pathétique Symphony.

This conductor has more power to command an orchestra in his little finger than many others could summon from their whole body. His mostly Chaikovsky concert on Friday night brought us Svetlanov in unmistakable style. With gentle hand gestures he transformed the Philharmonia into a convincingly Russian orchestra.

The performance of the Sixth Symphony was melodramatic, though not necessarily more so than with other leading Soviet conductors. The development section of the opening Allegro worked up an exciting head of steam and right through the work the coutrasts between vigorous and lyrical sections were violently marked.

In the Violin Concerto it was again Svetlanov who generated the most interest. The violinist Valery Klimov has a good Soviet pedigree and a technique fully equal to the Chaikovsky concerto, but there was a lack of variety in his playing that left even the plaintive G minor melody of the Adagio and its contrasting central section sounding mnch the same. The finale was more exciting, but it was Svetlanov's pace and flair that set the hair on end.

The concert had opened with Svetlanov's own *Dawn in the Fields*, part of a larger cantata. This piece gives away where the conductor's musical heart really lies – in grand and lyrical rhetoric, richly scored, opulently romantic, in the best Rimsky-Korsakov tradition. If the BBC's *Onedin Line* ever sets sail again, they have a new theme-tune ready made.

Richard Fairman

Beef, No Chicken

SHAW THEATRE

The Trinidadian comedy that rounds off the Black Theatre season in the Euston Road curiously recalls those whimsical glimpses of Irish life by Lady Gregory, say, that heralded a nationalist school of playwriting and greater things to come. Derek Walcott, a distinguished scholar and poet as well as playwright, may occupy a similar position; except that subsequent black writing gives no sign of throwing up an O'Casey, let alone a Synge. Are we – they – right to assume that *black* provides an identifiable and consistent label, as opposed to Caribbean, American or African, for example?

Mr Walcott's play is a slow starter. Janey Gardiner'a design gives us the ramshackle diner (at an Expressionist slant) that backs "Otto'a Autos." Garage mechanic Otto himself is single-handedly opposing the new highway currently under construction up the road, even to the extent of donning a flowered dress by night and impersonating the spirit of an uprooted silk tree to haunt the desecrators. His sister Euphony awaits her Cardiff Joe, merchant seaman, miner and boxer, not seen for years, in a state of impregnable 45-year-old virginity. This tantalises the schoolteacher Eldridge Franco, smooth-spoken and opinionated, given to Shakespearian quotation (incomplete), contempt for radio announcers' declining standards ("dese and dose") and florid rhetoric ("You jest, cruel virgin, you jest!").

Having got his characters together, the writer takes his time with the plot. A television presenter crashes into Otto'a wall, offers everybody jobs on his new channel, and departs with Otto's starstuck niece, just like that. Two balaclava-masked guerillas attempt a hold-up in aid of the Revolution and are talked into buying church raffle tickets by an unruffled Euphony who also promptly organises them into a bank-roll robbery. She sends them on their task with "May the Lord bless yon in your work," adding piously to the deity, "send us more t'ieves."

A dramatic contrivance engineers a Borough Council meeting in Otto's yard, and Mr Walcott's satirical teeth begin to show. The mayor wistfully yearns for real problems to materialise: "I want to fight pollution – blight, crime, scandal . . . that to me is vision!" And the chaotic climax of the meeting is marked by Mr Lai-Fook's thrilled cry of "Corruption! Attempted rape! We're becoming a city . . . just like television!"

By uow the good-natured acting in John Matshikiza's production has won us over, aloug with the author's humour, often at its best in glancing throwaway afterthonghts. Further complications (including the return of Cardiff Joe) underline how construction is secondary to droll characterisation, how dramatic shape is subordinated to comic cameos. Not all the spokeu lines are intelligible, but Carmen Munroe (much too beautiful for the expectant spinster) is an unfailingly stylish performer, and Susan Lycett, as the widow who provides recreation for the town's bachelors and doubles as the council secretary, exudes roly-poly charm as she reads from the minntes she herself has written, with effort and an air of pleasurable surprise.

Martin Hoyle

ARTS GUIDE

March 10-16

OPERA AND BALLET

London

English National Opera, Coliseum. The first-ever Coliseum *Falstaff* is by the "home-team" of Mark Elder (conductor) and David Pountney (producer). Benjamin Luxon takes Verdi's title role, and the cast also includes Malcolm Donnelly, Janice Cairns, and Anne Collins. Further performances of Bizet's uneven but lovably fresh and tuneful *Pearl Fishers*, with Cathryn Pope Arthur Davies, and Alan Opie. Jonathan Miller's successful big-house adaptation of Britten's greatest chamber opera, *The Turn of the Screw* is revived.

Royal Ballet, Covent Garden. *Romeo and Juliet* on Saturday; on Tuesday March 14, a new triple bill will be seen.

Sadler's Wells, the season of Spanish Zarzuelas continues.

Paris

Centre Georges Pompidou, Grande Salle. *Gloire en Solo*, choreography by Sidonie Rochon (42744219).

Amsterdam

Netherlands Opera with Rossini's *I Barbiere di Siviglia*, designed and directed by Dario Fo. Stephen Barlow conducts the Netherlands Philharmonic, with David Malis as Figaro, Louise Winters as Rosina. (Wed, premiere) (255 455).

Vienna

Staatsoper. In repertory: *Rigoletto* conducted by Elio Boncompagni, with Marielle Devia, Klara Takacs, Waltraud Winsauer, Manfred Hemm; *Le Nozze di Figaro* conducted by Ion Marin, with Sona Ghazarian, Yvonne Kenny, Gabriele Sima and Kurt Rydl; *Tosca* conducted by Severini and Weisse Rose, conducted by Udo Zimmermann; the cast includes Raina Kabaiwanska, Luciano Pavarotti, Ingvar Wixell and Gottfried Hornik; *La Traviata* conducted by Elio Boncompagni and sung by Waltraud Winsauer, Ingvar Wixell, Horst Nitsche. Ballet: *Raymonda* conducted by Caspar Richter (51444).

Berlin

Deutsche Oper. The successful Götz Friedrich *Ring* production returns with *Die Walküre, Siegfried, Das Rheingold*. The main parts are sung by Toni Kraemer, Hanna Schwarz, Ute Vinzing, Karan Armstrong, Robert Hale, and Lucy Peacock. *Fidelio* has wonderful Jean-Pierre Ponnelle production and Heinrich Hollreiser takes over as conductor. *Die Lüstigen Weiber von Windsor* rounds off the week.

Hamburg

Staatsoper. *Der Liebestrank* brings Hellen Kwon, Kurt Streitand Rolando Panerai together. *Manon Lescaut* has a first-rate cast including Mara Zampieri, Hans Helm, Ermanno Mauro and Dieter Weller. *Die Hochzeit des Figaro* features Felicity Lott, Wolfgang Brendel, Dagmar Schellenberger and Gilles Cachemaille. *Die verkaufte Braut* is a well done repertoire performance.

Frankfurt

Opera. *Le Nozze de Figaro* has Francesco Facini in the title role, Helena Doese (Countess Almaviva), Teresa Ringholz (Susanna), Bodo Schwanbeck (Bartolo) and conducted by Roderick Brydon. *Fidelio* in Achim Freyer's production features Luana Devol, Michal Shamir, William Cochran, Hartmut Welker and Hans Tschammer. Also in repertory: William Forsythe's ballet *Impressing the Czar* and *Behind the China Dogs*.

Stuttgart

Opera. Stuttgart celebrates the 200th anniversary of the French revolution with the city's first staging of *Andrea Chenier*, produced by Ian Strasfogel with sets by Hans Hoffer. The cast includes Bruna Baccaria, Paolo Gavanelli, Gabriele Benackova-Cap, Helene Schneidermann and Irmgard Stadler. *Cav and Pag* has a strong cast led by Ludmilla Schemstschuk, Wladimir Atlantow, Julia Cornwell, Eugenia Moldoveanu and Raymond Wolansky. Further performances of *Tannhäuser* and a ballet evening with choreographs by Jiri Kylian.

Cologne

Opera. There was much applause for Harry Kupfer's production of *Lady Macbeth von Mtsensk*, when it opened. *Lohengrin* has fine interpretations by Nadine Secunde, Eva Randova, Manfred Schenk, Eberhard Buechner and Ekkehard Wlaschiha. Also offered *Don Pasquale* with Carlos Feller.

Rome

Teatro dell'Opera. Verdi's *Ernani* conducted by Giuseppe Patane, with Juan Pons, Giuseppe Giacomini, Gianfranco Casarini and Silvia Mosca (46.17.55).

Milan

Teatro alla Scala. Riccardo Muti conducting Giorgio Strehler's production of Mozart's *Le Nozze di Figaro*, with Elizabeth Norberg Schulz, Gloria Banditelli, and Cheryl Studer (alternating with Daniela Dessi). (80.91.26).

New York

Metropolitan Opera. Opera House, Lincoln Center. Nello Santi conducts the first seasonal performance of *Rigoletto* with Hei-Kyung Hong as Gilda and Leo Nucci in the title role. The week also includes the last performances of *La Bohème* with Fiamma Izzo D'Amico as Mimi and Placido Domingo as Rodolfo, while Neil Shicoff leads the cast in *Werner* conducted by Jean Fournet. Eva Marton has the title role in *Salome*, directed by Nikolaus Lehnhoff and conducted by Marek Janowski, with Helga Dernesch as Herodias. (362 6000).

Washington

Dance Theatre of Harlem. Kennedy Center Opera House. New productions of Michel Fokine's Prince Igor and Eugene Loring's Billy the Kid highlight the fortnight visit of a classic American contemporary ballet company. Ends March 26 (254 3770).

SALEROOM

Maiolica prices soar

The world record price for a piece of Italian maiolica was matched yesterday when an Urbino istoriato charger sold at Christie's soared to £99,000. The dish, beautifully painted and in excellent condition, was estimated at £20-30,000. Produced in the workshop of Orazio Fontana around 1560, it illustrates the story of Europa and Jove. Its companion piece was sold at Christie's in July for £17,000; the disparity of price is an indication of the revival of interest in maiolica, witnessed by the exceptional prices achieved at Sotheby's last October.

The same dealer paid £60,500 (estimate £10-15,000) for another, slightly earlier istoriato dish from the same workshop. This claims a distinguished provenance, coming from the second series of plates made by Fontana for Guido Baldo II, Duke of Urbino, and decorated with scenes from the second Punic war.

Provenance and market rarity again assured a favourable reception for a recently discovered Naples royal soup tureen and cover from the Ercolanese service. A piece from this porcelain service appears never to have come onto the market. The service was ordered by the Bourbon Ferdinand IV in 1782, and the inscription on this tureen reveals the inspiration for the entire service to have been the bronzes found at Herculaneum. Estimated at £20-30,000, it went to a private bidder for £46,200.

At Sotheby's an Edo period ceremonial palanquin was carried away by a Tokyo dealer for £82,500 (estimate £30-40,000). Fujikura secured a number of the top porcelain lots for high prices, including a boldly decorated Ko-Kutani style dish for £49,500. Good quality Japanese paintings rarely appear on the market in the West, and the best of the small group on offer, a 17th century Tosa School handscroll of the Gion Festival of Kyoto, brought to England by the naturalist N.H. Moseley, will be repatriated by a Kyoto dealer for £37,400.

Susan Moore

FINANCIAL TIMES

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Leap forward in Poland

THE PARTICIPANTS in the Warsaw round-table talks, scrabbling on the floor in search of the highest common factor linking the ruling Communist Party and the Solidarity trade union opposition, appear at last to have found it. It is their resigned acceptance that compromise, leading to at least broad agreement on the rules of the political game, is indispensable if the country's economy is to be pulled back from the brink. General Jaruzelski's long quest for a contract with the Polish people which would enable him to succeed where both his predecessors failed and to introduce painful economic reforms, including sharp price rises, may be drawing to a satisfactory close.

The agreement on a reconstructed parliamentary system with substantial scope for opposition parties, though still short on detail, would appear to be a leap forward on the road to multi-party socialism. The Poles certainly seem to have overtaken the Hungarians, whose steps in that direction now look hesitant and faltering by comparison.

The proposed new system would leave power in the hands of the official coalition (comprising the Communists, the Peasant and Democratic parties and the Catholic Church group) which would hold 65 per cent of the seats in the Lower House – the Sejm. But the Communists would have to depend on the support of their junior coalition partners for control of day-to-day political decision-making.

Credible opposition

The role to be played by the presidency is not yet clear. It would probably be reserved for a Communist Party appointee, in all likelihood, on present form, General Jaruzelski himself, and might carry the right of veto. Equally obscure are the functions of a second upper house, in which all seats might be up for grabs and which has been mooted as a possible way of enlarging the scope of the opposition parties.

The Communists appear determined to preserve enough of a majority to effect constitutional change and hence their ability to control the broad outlines of political developments, but the proposed division of power could provide a workable foundation for a credible opposition. The Communists are not about to cede control, but their readiness to contemplate a weakening of their monopoly of power is unprecedented in Eastern Europe.

The opposition has much to play for. Free access to the media and skilled use of public opinion could severely limit the usefulness of the Communist Party's inbuilt majority. Solidarity is not the force it once was. It appears unable to decide whether to be a trade union or a reform movement – some members appear still to believe that it can be both at the same time.

Uphill battle

The continuing arguments on this are shackling the movement's development to a point where it can no longer take mass popular support for granted, not even in the industrial urban centres which remain its power base. Lech Walesa can no longer count on the uncritical support of the movement he leads and could face a steep uphill battle in persuading it that the new "democracy", with the circumscribed role it offers the opposition, is a fair price for its co-operation.

What is also of concern is the price in economic reform that Solidarity is trying to extract from the regime. One of its demands – for the full indexation of wages to inflation – is clearly asking too much, both as a practice, because inflation is rising by anything between 50 and 100 per cent a year, and as a principle. The assistance that Poland needs to reschedule its foreign debt is not going to be forthcoming if indexation is an integral element of economic reform.

For no fairy godmother – Communist or capitalist – appears to be waiting in the wings to alleviate the pressing need for compromise. The danger of losing credibility by settling for too little seems less of a threat to Solidarity's leaders than it might have done in more prosperous times. For the time being, they may opt to live in different rooms, but they will have to live under the same roof – or they may not be able to afford a roof at all.

The doctors disapprove

BRITAIN's medical profession appears to be heading for its biggest confrontation with government since the 1960s – possibly since the 1940s. The British Medical Association (BMA) has condemned most of the changes proposed in the recent health white paper, arguing that they will reduce rather than improve the quality of patient care. The BMA leadership, moreover, appears to have the strong support of its rank-and-file members.

Many GPs fear the increasing commercialisation of medicine and argue that innovations such as self-governing hospitals and budgets for family doctors will create a two-tier service – and, ultimately, lead to privatisation of health care. But they also have a specific and short-term focus for discontent: the new contract unveiled by Mr Kenneth Clarke, the Health Secretary. This is intended to reward GPs who provide high quality services and make family doctors more responsive to customer needs.

The new contract proposes to increase the proportion of a GP's income derived from capitation fees from around 47 per cent to at least 60 per cent – in other words to increase significantly the proportion of pay that is directly related to the number of patients on a GP's list. The second big change is a more rigid mechanism for encouraging childhood immunisation and cancer screening. Item of service payments are to be replaced by an all-or-nothing regime: GPs who manage to immunise 90 per cent of their practice will get a large bonus; those who fall short of this target, by however small a margin, will get nothing.

The increase in capitation fees is supposed to make GPs compete harder for patients. But in what other business would ministers suggest that pay should be related principally to the number of customers served rather than to the quality or quantity of services provided? Surgeries are already crowded and doctors are criticised for devoting too little time to individual patients. An excessive reliance on capitation fees is almost bound to result in a lengthening of lists and a deterioration in the quality of patient care.

The all-or-nothing rules for immunisation and screening are equally dubious. In deprived areas and inner cities the targets may well prove hopelessly optimistic. Doctors in such areas, knowing that they have no hope of getting the bonus, are likely to reduce their efforts. The formula is half-baked even as a financial incentive: what car salesman is told he will get £5,000 if he sells 10 cars but nothing if he sells nine?

Family doctors are justifiably upset, not just by the specific proposals, but by Mr Clarke's high-handed approach. What group of workers would respond well to a proposal for changed remuneration that blandly points out that some individuals will lose up to £8,000 a year if they fail to increase the size of their practice or offer the Whitehall prescribed list of services? The right way to design a better contract for GPs would have been to set up a working party of civil servants, health economists and doctors. The pros and cons of different payment mechanisms could then have been rationally debated. There is no reason to suppose that Mr Clarke and a coterie of officials are capable of designing the ideal contract.

Worries about the contract have been exacerbated by other proposals in the health white paper. GPs who accept budgets will have a direct incentive to economise on patient care. But those who do not will have less freedom to refer patients to the consultants of their choice – they will have to abide by the block contracts negotiated by health authority managers. This is an unpleasant dilemma for GPs.

In drawing up the new GP contract and in the wider reforms, Mr Clarke and other ministers have behaved as though they had a monopoly of wisdom on health matters. The Government did not consult before it produced the white paper: indeed, it did not even announce the NHS review's terms of reference. The result is a less than coherent set of reform proposals which the medical profession has every right to criticise.

David Buchan and **Geoffrey Owen** talk to Jacques Delors, President of the European Commission

Undimmed ambitions for unity in Europe

"IF ONE accepts the idea – as I do – that to get maximum advantage out of the creation of the big new European market, we need to reinforce our economic and monetary co-operation; then we have to go beyond the present European Monetary System, without abandoning it.

"One could take a very modest, symbolic first step without a treaty. But, I tell you, rapidly we would be obliged to have a treaty, because the institutional and practical situations of central banks differ according to the various member states."

Only a month away from completion of his anxiously-awaited committee report on possible next steps to greater economic and monetary unity in Europe, Mr Jacques Delors makes clear his undimmed ambitions to give the European Community new monetary, even foreign policy, dimensions.

At the same time, the Commission President shows himself, in a wide-ranging interview, to be sensitive, even conciliatory, to many of the objections raised – chiefly in Britain, but also in other parts of the Community. On such politically touchy issues as cross-border takeovers and worker participation, Mr Delors promised "the minimum" of regulation from Brussels. Repeatedly claiming to want to avoid new wars of ideology, he says his main goal remains consensus among the 12 member states.

But is not the controversy over new monetary arrangements a dangerous distraction from the business of forging the single market by 1992? No, says Mr Delors. "We (in the Commission) are not straying from our essential task of putting into effect the Single European Act and the internal market without frontiers . . . I personally devote as much time to the internal market as to monetary matters."

What is wrong with the status quo? The answer, says Mr Delors, is that the EMS has proved its worth over the past 10 years, first, in providing "relative stability" in Europe and, second, as "the best incentive for economic convergence, particularly as regards the fight against inflation and external currency fluctuations. I myself, as finance minister (of France 1981-84), led a famous battle on these points."

But the EMS has hit its limits "because the system is based on the D-Mark and on the economic and monetary policy of Germany. This was fine, as long as other countries participating in the EMS's exchange rate mechanism had as priority to refind their way to stable growth. But this is no longer sufficient."

Recalling a Financial Times interview with the British Prime Minister, Mr Delors says Mrs Thatcher had "rightly, though somewhat brutally," remarked of the EMS: "I don't want to belong to a deflationary system." Only by a new arrangement, he says, can there be "a more balanced division between the needs for growth and competitivity on the one hand, and the imperative for stability, on the other." The paradox is that as countries "enlarge their field of co-operation" in economic and monetary policy, "they will each find additional room for manoeuvre."

What about the strong British antipathy to further amendments to the Treaty of Rome to allow greater monetary co-operation? "It is not necessary that the question of whether, and above all when, we need a treaty should create a climate of dramatic division among the Twelve," says Mr Delors. "Whatever the content of the report by my committee, I will do my utmost to make clear that nothing can be done, except step-by-step. For instance, at the creation of the EMS it was envisaged that in two years a European Monetary Fund would be created. It never happened because the conditions were not right."

"So any new treaty cannot contain fixed deadlines, like the 1992 goal for the internal market. It would simply have the institutional instruments to pass from one stage to another without having to unleash a new institutional debate. But if the conditions are not fulfilled, passage to a further stage would not take place. Many British friends who understand the link between the internal market and economic and monetary co-operation say one should not over-conceptualise the problem – it runs against British culture. I understand that."

Clearly anxious not to be seen to be imposing his views on other members of the special monetary committee, Mr Delors says: "I am doing what I can to ensure that the representative of Britain (Mr Robin Leigh-Pemberton, Governor of the Bank of England) can get across his point of view, so that the discussion can be comprehensive."

Though eschewing any fixed calendar for monetary developments, Mr Delors has his eye on one date – July 1 1990, when the eight richer EC states are committed to completely freeing capital movements. If this happens, "it will be the test in several ways – first, we will have settled the question of approximating systems of taxing capital income, then we will have decided to reinforce our monetary co-operation so that this large financial space will not be subjected to serious fluctuations, and finally we will have given to our financial centres the opportunity to be among the most important in the world."

Mr Delors says he has pushed for capital liberalisation ahead of 1992, "because in terms of synergy and dynamism, this is the central decision." It is this which "draws all other things along, it is this that leads to a reassessment of financial services in our economies, 15 per cent or more of total value added, it is this that gives us our say in the world in discussions with the Americans and the Japanese on debt, on financial flows, it is this that allows us to envisage passing from the EMS to enlarged economic and monetary union, including Britain in whose interest this is."

"The biggest financial centre in Europe is, indisputably, London," Mr Delors acknowledges. "But I have read expert reports showing how London is being strongly challenged by New York and Tokyo. I want the prosperity of London, and of Paris, and each will have a role to play."

This should, and can, be achieved without increasing Community legislation. "The proof is in that in controlling takeovers, we have not proposed, as the French requested, a European Commission des Bourses. We have asked each country to establish its own rules. These rules must be equivalent, but diversity plays a role. The guiding principle in Britain is 'market confidence' – in other countries, even the US, it is more interventionist. But we are not creating a new European institution."

Recognition and acceptance of differing industrial relations histories and traditions among the twelve member countries is also the road to success in Community social policy, says Mr Delors. "If certain people want to impose their model on everyone else, it will cause a serious political crisis," he forecasts. He maintains that his dialogue with employers and unions does "not interfere in national problems whatsoever." In addressing the British Trades Union Congress last September, he says he made no more concessions to it than to restate his general commitment to all of Europe's trade unions.

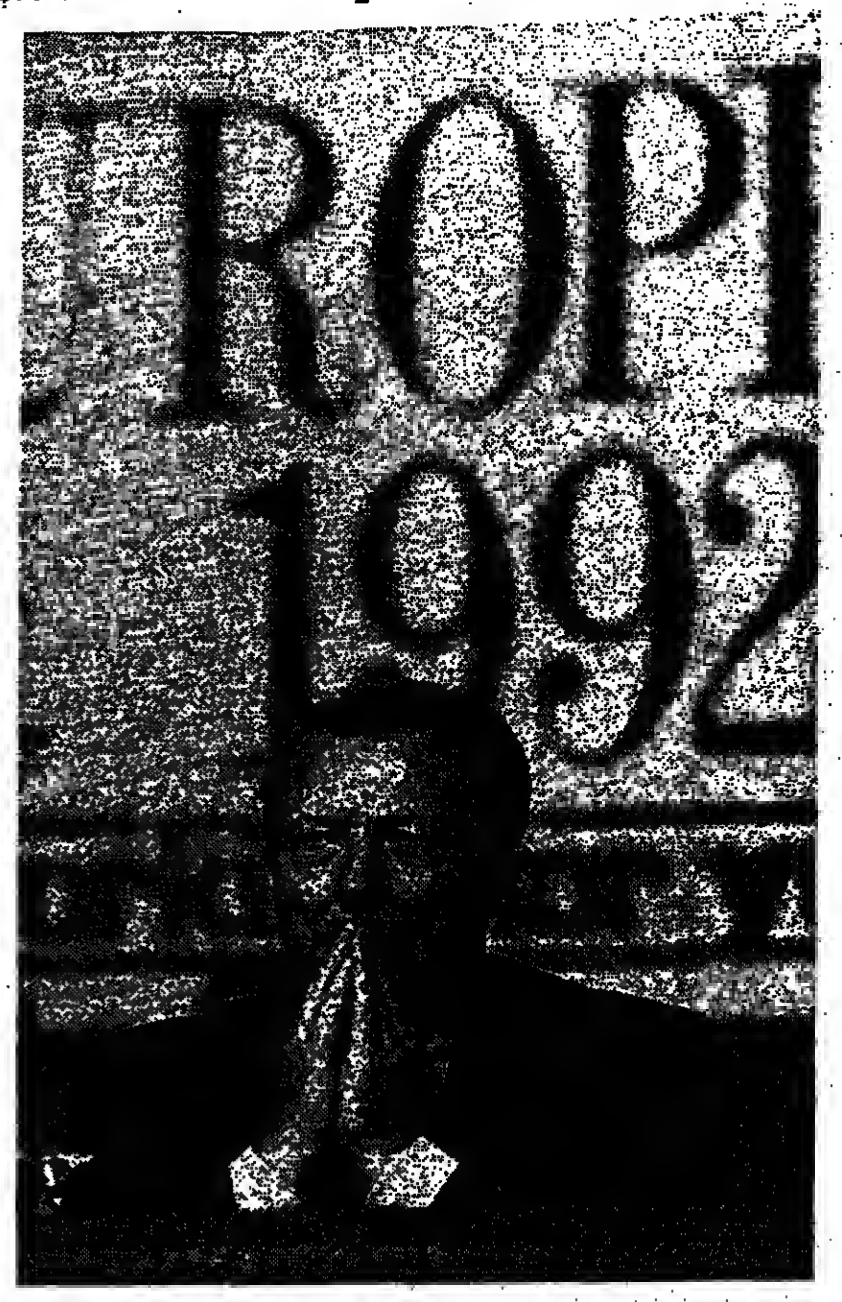
"This is the political aspect of my work – to keep contact with unions, not to lie to them, to strive to find the minimum of measures and directives which is acceptable to all," he says.

The hardest part concerns the proposed European Company Statute, the Commission President readily admits. This is the Commission's revived effort at legislation to facilitate cross-border mergers. The problem is that Germany and several other EC states will not agree to such a statute without the sort of worker participation that is anathema to the UK Government.

Mr Delors is adamant that he wants to avoid the ideological uproar created by the so-called Vredeling directive in the early 1980s on worker participation and information. First, he canvassed companies to see whether they still wanted an EC-wide statute. Ninety five per cent said yes. Then, he decided that the statute should not replace national law, but would be optional for those companies which were interested in its economic advantages, and that, further, companies could choose between three forms of worker participation.

These options are "first, the Mitbestimmung as practised in Germany; second, the formula centred on the company committee elected by workers and consulted on certain subjects; and the third, which he says corresponds to British preoccupations, which "consists of setting aside legislation and leaving to each enterprise the job of discussing with worker representatives the way in which they should be informed, consulted and able to give their opinion." Mr Delors professes himself baffled as to why this should provoke "a thunderclap".

"I have fought for 30 years against Marxist and other ideologies in the name of a more temperate conception of society – et voilà, I find myself faced with a reaction that is purely ideological."



Jacques Delors: planning innovations in EC monetary and foreign policy

What is the Delorian model for Community industrial and trade policy? "As long as our partners don't resort to protectionism or dumping, there is no reason for us to take the offensive in these areas. Our prosperity is tied to our openness, but this openness must not mean naivety."

"We must get rid of trade barriers, adopt the minimum of rules for markets to work properly, fight against abusive concentrations, blocking moves preventing companies from entering markets." He says he sees no need for the Community to pursue "an active" industrial policy in guiding, aiding, protecting sectors and companies. Competition policy, plus "the creation of structures that allow our companies to work together, the European Company Statute, the development of joint research and development programmes" should allow "the optimal allocation of people and resources."

Interestingly, as an example of misallocation of such resources, Mr Delors cites the defence industry, a sector targeted by the Commission in its 1985 internal market white paper but so far left untouched by Brussels. The defence industry is "the most immobile – because of national vanities, captive markets, the power of the military, we do not cooperate sufficiently and we waste money."

But what does naivety mean? What should be Community policy towards Japanese car imports? "We have a heritage here. It is impossible to take revolutionary steps" with regard to cars, says the Commission President. "We need a common market in cars, just as in textiles or in televisions. Perhaps there will have to be period of five or 10 years to create this."

Certain countries may not be so interested in liberalising one sector or another. "But this is part of the collective contract (of the Community) – it is a positive sum game," Mr Delors stresses. He says problems such as France's reluctance to import UK-made Nissan cars are "little difficulties" in comparison with the bigger game of constructing Europe.

But Mr Delors counts it as "my greatest disappointment" that the twelve countries have not so far agreed a Community policy on East-West relations. Changes, particularly in Moscow, have opened the door for a more active Community stance, not only on economic issues, but also on political and cultural matters. "But timing is very important", and he worries that in a year or three the door may close again.

However, he has hardly been inactive on the foreign policy front, with his invitation to the Community's neighbours in the European Free Trade Association (Efta) but also to certain East European countries to reach a new relationship with the EC. It is a measure of this ambitious, and above all intensely political, Commission President that he wants to round the Community off with a common money and foreign policy.

OBSERVER

A summer surprise

■ The surprise in what almost everyone has billed in advance as a boring Budget today would be for Chancellor Lawson to announce that Britain is preparing to join the exchange rate mechanism of the European Monetary System.

Almost certainly it will not happen; possibly the Budget speech is not the most appropriate occasion. Yet the Prime Minister is to some extent bound by her own statements. She has said that we will join "when the time is ripe". And it does not require great prescience to see that the time is ripening.

True, the time has gone when the Chancellor and the Foreign Secretary, Sir Geoffrey Howe (himself an ex-Chancellor), could have approached the Prime Minister in a phalanx and said that her principal ministers advised entry. If they had tried that a year ago, they might just have got away with it. In the unlikely event that they were to try it now, other ministers might be only too pleased to see them rebuffed because a lot of them want the Chancellor's and Foreign Secretary's jobs.

Still, there are other pressures. Quite soon, even Mrs Thatcher might think that full membership of the EMS might be preferable to ever higher interest rates designed to check a run on sterling. Come (say) June, the Government might want lower interest rates coupled with a stable exchange rate. Joining the Exchange Rate Mechanism (ERM)could become rather tempting.

Some of the pressures may be external. The West Germans, for example, seem to have become rather more openly desirous recently that Britain should come in. Karl Otto Pöhl, the President of the Bundesbank, has always been keen on it, and recently gave the Prime Minister lunch in Frankfurt.

There is also the Delors Report, about to come up with recommendations on the future of economic and monetary union. Surely the British Government does not want to oppose it lock, stock and barrel? Entering the ERM would be a sign that Britain is at least part of the general enterprise.

And there might – just might – be some gentle persuasion from the US. If the Bush Administration were to say that it would prefer Britain to go in, it would be quite hard to argue with.

Mrs Thatcher's opposition to full membership should never be underestimated. It is at least as strong and at least as emotional as Harold Wilson's opposition to the devaluation of sterling in the mid-1960s. Yet he was shown to be wrong and had to devalue in the end.

So we come back to the Prime Minister's "when the time is ripe" or, as some transcripts have it, "right", and her other criterion: "When the British economy is strong enough." If the time is not ripe soon, when will it ever be? And if the economy is not strong enough during its period of high growth, what next?

No leadership

■ Another instalment in the long-running saga over the succession to the chairmanship of National Westminster Bank takes place today with a group board meeting. But it may not be the clincher.

This, at least, is the view from the chambers of Lord Alexander QC, who has been widely tipped to succeed Lord Boardman. The comment there was that talk of Alexander had all been got up by the press, but that nevertheless a decision about the appointment would be taken next month.

There is, indeed, one more board meeting, just a week before the annual meeting on April 18, when shareholders will be invited to vote in a new chairman. That would be cutting it a bit fine. If it is Alexander, then a successor will need to be found for him as chairman of the Takeover Panel, a post he only took up in June 1987.

Altogether, the NatWest succession is turning out to be a strikingly clumsy exception to the traditionally smooth workings of the City's behind-the-scenes appointments machine.

"It's a fridge that works on unleaded petrol."

Nerves of Steel

■ The far right has been making its mark on the fringes of West German politics of late, most recently in the local elections in Frankfurt on Sunday. Yet there was not much sign of it at the 39th annual Anglo-German conference in Königswinter at the weekend: it was all too consensual and eminent for that.

There was a sprinkling of Greens, the other party which has been on the way up. And the Liberals, both British and German with small and large "l's" were quite decently represented, but seemed a bit depressed.

David Steel, Britain's former Liberal leader, was discovered staring over the balustrade onto the waters of the Rhine. Friends came up behind him and said: "Don't do it, David." He had not been planning to jump; he was just checking the pollution level.

Minorco's bid

■ The bids are rising in the auction for the specimen ore on behalf of the Vikki Harris Laser Fund. Minorco, the holding company presently bidding for Consolidated Gold Fields, has put in an offer of £10,000 and is willing to go higher as soon as anyone tops it. The letter from Minorco says that the company would regard more than £10,000 as overpaying for the ore, but would do it with pleasure because of the good cause.

Moreover, if Minorco is eventually outbid, it will still contribute £10,000 to the fund. The closing date for bids is next Monday (March 20). Details were explained in the Observer column on March 9. The ore is from the Welsh mine that produced the Royal wedding rings and the money is being raised to help cancer patients at St Bartholomew's Hospital in London.

Nice girl

■ A reader recently in Baghdad reports that when he went to an Arab night club one evening he had hardly sat down at a table when a red-haired belly-dancer flung her arms round his neck and whispered in a broad Lancashire accent: "Don't order the Scotch, love – it's watered."

LETTERS

Let the passengers pay

From Mr David Sawers.

Sir, Your leading article on the proposed new railway between London and the channel tunnel (March 10) argued that there is no reason why future passengers should bear all the costs of preserving the Kent countryside from the effects of this new line.

But who else should bear these costs? The passengers would be the main beneficiaries of the new railway; and the cost of reducing its impact on Kent is just as much a cost of constructing the railway as is the cost of laying the track. As the railway is being built to carry passengers for profit, they should pay all the costs of building it; if they are not expected to provide enough revenue to cover all the costs, the line would be unprofitable and should not be built.

If the railway needed a subsidy to compete, its construction would represent a waste of the nation's and of the taxpayers' resources; it could only benefit the economy if it were a more efficient means of transport than those it supplanted. The case for launching the new railway is the same as that for launching any new product, and there is no more reason for the state to subsidise it.

Your article also suggested that environmental costs should not be determined solely by the volume of local protest. But when environmental losses cannot be objectively valued, the cost of buying off the local protesters is one of the better measures of the environmental costs of a project. A debate on such issues is more likely to be a presentation of conflicting opinions than the rational argument you seem to expect.

The eccentricity of which you accuse the British government is no more than the application of the elementary principles of economics to a sector that has for many decades been protected from their operation. European travellers and taxpayers should hope that such eccentricity becomes the norm.

David Sawers,
Crosby, 10 Seaview Avenue,
Angmering-on-Sea,
Littlehampton, West Sussex.

People on the balance sheet

From Mr G.M. Watson

Sir, Richard Waters's article on "Peopla Accounting" (March 3), is not as far-fetched as he makes it sound.

There are a host of businesses where them main asset, the skills of its people, is not valued on the balance sheet. Advertising agencies, accountancy firms, and software houses are only a few examples.

However, even in those businesses where there is a high cost value tied up in plant and machinery or working capital, the value of the people skills is possibly still the most important asset in terms of profit generation.

How many company chairmen would dare to omit the final paragraph from their annual report, thanking their employees for their hard work, skill, patience or understanding.

Valuation of the people asset is certainly tricky but not, perhaps, as tricky as Richard Waters suggests. In the unfortunate absence of transfer fees, historical cost is difficult to determine. Nevertheless, it would be possible to envisage a value based on length of training period required, cost of replacement, cost of redundancy and pension provision, applied as a factor of current salary.

Accepting that time served does not necessarily represent value to the business, the cost of redundancy or pensions is often of key importance in acquisitions or closures.

Having recognised the value of the people asset, we must also consider that some of the revenue cost incurred by these skilled people – design and maintenance of management information systems, leasing of plant or buildings, and so on – may be undertaken in order to minimise the balance sheet assets.

We ought, therefore, to be looking for a way of valuing all the assets employed in the business, irrespective of whether we describe them as revenue or capital.

The really tricky bit is to get the taxman to accept our valuation.

G.M. Watson
65 London Road
Whitechurch,
Hampshire.

Giving support

From Mr Tony Webb.

Sir, Further to Mr Palfrey's letter (March 9), may I point out that both the CBI and the universities welcomed the Higginson Report, commissioned by the Secretary of State to recommend ways in which the A-level system could be made more responsive to the changing needs of young people, business and higher education.

The CBI gave particular support to Dr Higginson's proposal that students should have the opportunity to study a broader range of subjects in the sixth form, and precisely for the reasons given by Mr Palfrey.

The CBI has publicly urged Mr Baker to broaden sixth-form studies and supports his drive by developing advanced/supplementary (A/S) levels. All institutions of higher education now accept, for purposes of entry to undergraduate courses, two A/S levels in lieu of one A level. The CBI will continue to urge ministers to make every effort to help schools broaden their sixth-form curriculum by reducing the knowledge and content of over-burdened A-level syllabuses, rationalising the proliferation of such syllabuses and providing resources for the broader spread of A/S levels.

Tony Webb,
Confederation of British Industry,
103 New Oxford Street, WC1

When the cat is away . . .

From Mr John B. Francey.

Sir, The development of a micro-thermonic valve described by David Fishlock (March 7) took me back half a century to a time when I was working as a very young research assistant in a Glasgow laboratory. On one occasion I had to help a professor construct a wireless set which was designed to receive time signals from various parts of the globe.

Almost every component used was hand made, with the exception of the valves, each of which was about the size of a light bulb. The professor spent his day logging obtruse signals, which I could make nothing of, and entering the results in subsequent calculations.

The professor left the laboratory every evening fairly early to catch a train, and it was then that I came into my own. By using two wire "jump leads" which I kept in my locker, I was able to make temporary alteration to the circuit which enabled me to listen to the then equivalent of "top of the pops", which would feature, as I remember, such names as Henry Hall. The professor never knew since I always remembered to remove all traces of my work.

John B. Francey,
59 Aytoun Drive,
Erskine, Renfrewshire

Bigger issue

From Mr Roland Hummerston.

Sir, Mr Young's case in favour of share certificates (March 4) exemplifies a tangible matter that is more meaningful and relevant to the private investor than mere hot air about the encouragement of wider share ownership.

The securities industry steering committee on TAURUS is by definition lacking in any independent representative of the private shareholder to whom "it is hoped that the reduction in settlement costs from a dematerialised environment can be passed." All other advantages are, by inference, for the benefit of the large institutional shareholder.

It remains to be seen if the committee's advice to the council of the Stock Exchange is deliberated upon with or without the latter giving consideration to the requirements of the private shareholder.

The elimination of the share certificate could be as harmful to the cause of wider share ownership as the disadvantage experienced by the private small investor awaiting receipt of his or her letter of acceptance while the institutional applicants are allowed to have their way and trade in the market.

Roland Hummerston,
11 Lansdowne Court,
Churchfields
Broxbourne, Herts.

Relief for the aged

From Mr A.J. Cormack.

Sir, I was disappointed to note that the Finacial Times did not report on the slump in the Government's majority in the Commons relevant to the defeat of a bid to revoke certain community charge regulations which come into force in Scotland on April 1. Presumably had this been of "national" importance it might have been given a mention.

One of the factors dismissed by the Government is that those infirm and aged parents cared for at home by their children will not only save the local authority substantial amounts of money by not having to be looked after in geriatric centres but will also be subject to the appropriate level of community charges.

My grandfather, who will be 103 in July, is being cared for at home by my parents, both in their late seventies. Despite letters to Mrs Thatcher, Malcolm Rifkind and others there appears to be no political will to make an exception for relief from community charges for people eligible for 24-hour attendance allowance.

Perhaps by the time the community charge bites in southern Britain, the goal posts will have to be moved somewhat, otherwise the Government may find itself scoring an own goal over the issue of those persons being cared for at home rather than in institutions, and who are being treated inequitably with regard to payment of the community charge.

My former Conservative and progressive sympathies are rapidly receding and I can see this being replicated by many people south of the border once they are fully aware of the implications.

A.J. Cormack,
32 Golf Course Road,
Bonnyrigg, Lothian Region

Risks behind the shadows

From Mr N.H. Stanbury.

Sir, In their article "The assumed role of a shadow director" (March 2), Barry Donnelly and Martin Piers rightly highlight the potential exposure to risk of a bank (or other lender) in the capacity of shadow director of its corporate customer.

The authors suggest that a bank's officers may enjoy insurance cover against their exposure to risks but question whether the bank itself is likely to both seek and obtain corresponding protection. The simple answer is that the conventional directors and officers liability insurance cover does not embrace automatically directorships or shadow directorships in "outside" companies. There is, however, no reason why a suitable extension should not be sought and it is commonly given in respect of specified *de jure* outside directorships held by officers, for example where a bank invests in a company and appoints its own representative to that customer's board.

Furthermore, one leading Lloyd's underwriter can and does provide both banks and their officers with similar protection by extending cover on a "blanket" basis to embrace any deemed shadow directorship of a UK company.

It is worth remembering that extensions of cover of this sort are relevant in any situation where shadow directorships might arise, by accident or design.

Companies other than banks, together with their relevant officers, would be well-advised to re-examine their potential exposure in the light of their quasi-managerial relationships with other companies.

N.H. Stanbury,
Directors & Officers Ltd,
Marshall's Road,
Sutton, Surrey.

The role of consumer interest in EC trade restrictions

From M. Bronckers, A. Hoogakker, and R. Quick

Sir, It is by now well-recognised that trade restrictions, such as antidumping measures, generally operate as a tax on the consumer.

The question arises whether and how the consumer interest, notably in low prices, should be weighed before the EC takes these measures. Several observers have argued that the EC authorities must take the consumer interest into account. They point out that EC antidumping law does not give European industries, who can show that they suffer injury due to dumped imports, an absolute right to defensive measures.

EC antidumping law provides that measures can only be taken when "the interests of the Community" call for intervention. This seems to suggest that the EC authorities could refuse to impose antidumping duties if they were to find the resulting increase in consumer prices to be unacceptably high. The authorities have never done so, however. To do so would be erroneous.

When the EC, with the consent of the European Parliament, adopted the antidumping law, it was accepted that any antidumping measure would raise consumer prices (albeit indirectly sometimes, when duties are levied on raw materials or intermediate products). The law does not contain any standards on which the EC authorities could base a decision that anti-dumping measures raise consumer prices too much. Indeed, it is difficult to conceive of guidelines which would allow the authorities to decide in a given case that a price increase of, say 15 per cent, is acceptable for the consumer, and 16 per cent or more is not.

Nevertheless, some suggest that any consideration of the consumer interest, however imprecise or inconsistent, is beneficial, because it can only serve to lower antidumping duties. What can possibly be wrong for society as a whole, they say, if the EC authorities in a particular case find a dumping margin of 20 per cent, hold that an antidumping duty of 15 per cent would remove the injury inflicted on EC industry, but then decide to impose a duty of merely 10 per cent so that consumer prices will not rise too much? This approach is wrong because it risks discrimination between EC industries.

Take a hypothetical example. In case A the EC authorities find that the EC producers of car paint are injured due to dumped imports of paint. An antidumping duty of 15 per cent would increase the consumer price of a European-made car with less than 1 per cent. The authorities consider this price effect negligible and impose a duty of 15 per cent on dumped imports of car paint.

In case B the EC authorities find that the EC producers of cassette recorders are injured due to dumped imports of recorders. An antidumping duty of 15 per cent would increase the consumer price of cassette recorders with 10 per cent. This price effect is not negligible. But should the injury of this EC industry therefore remain unremedied? Who will explain to the employees and investors in the cassette recording industry that they are entitled to less protection than those involved in the car paint industry?

The effect on consumer prices cannot influence the outcome of antidumping proceedings under the existing law. This may seem a controversial conclusion, but is it really? Other measures, which protect industrial interests, raise consumer prices as well. When courts, for instance, prohibit companies from "passing off" or copying products of their competitors, on the basis of unfair competition or intellectual property laws, consumers are often denied access to cheaper substitutes. Yet this is generally accepted.

When a foreign company dumps in the EC, its objective is not to give consumers a benefit, but to gain market share in the EC. Consider that the consumer in the country from which the dumped products are exported will often pay more than the EC consumer. If what drove the exporter's pricing strategy would be the consumer interest, one would expect that company to charge a lower price to the consumers in both the EC and its home market. And then there would be no dumping, of course.

Some of the uneasiness about antidumping measures may be caused by the magnitude of their price effects (although the price effects of intellectual property laws are likely to be considerably higher). Yet these effects do not detract from the principle that the antidumping law, as it currently stands, recognises that injurious dumping is unfair and normally entitles the EC producer to protection. If more weight is to be given to the consumer interest, the antidumping law should be changed.

M. Bronckers
Van Doorne & Sjollema, Rotterdam
A. Hoogakker,
Philips Consumer Electronics, Eindhoven
R. Quick,
Conseil Européen des Fédérations de l'Industrie Chimique, Brussels

FOREIGN AFFAIRS

A missed chance for imagination

Jurek Martin examines the vicissitudes of President Bush and Prime Minister Takeshita

As last year ended, George Bush and Noborn Takeshita really were riding high. Mr Bush was about to become president of the United States and had been transformed by those who make images from wimp to superman. Mr Takeshita had, admittedly, recently lost a finance minister to what looked like a nasty scandal but he was also basking in the glory of a just-passed tax reform bill and seemed set for a while in office.

It seemed logical then for the two to meet early in the Bush presidency to begin what might be a protracted personal relationship. And so it happened twice – in Washington, where Mr Takeshita was Mr Bush's first official foreign visitor; and in Tokyo on the occasion of Emperor Hirohito's funeral. Lots of words were spilled about the US being, above all, a nation of the Pacific and about the bilateral connection having no peer in the US firmament, which, of course, is how it has long been seen from a Japanese perspective.

It may be a little fanciful but it is just possible that the two men missed an opportunity, in these initial exchanges, to do something really imaginative – something that would have set the world by its ears far more than the revelation last weekend that the US was prepared to allow Japan to become the number two power in the International Monetary Fund.

Mr Bush could have prevailed upon Mr Barber Conable, who has long been fascinated by Japan, to surrender the presidency of the World Bank, where he is not considered a glittering success, and to become instead US Ambassador in Tokyo. The Bank seat, a US preserve by tradition but not by charter, could then have been offered to a prominent Japanese – say, Mr Toyoo Gyohten, the vice minister of finance. That would have involved Japan at the highest policy making level through one of its most able and cosmopolitan civil servants in that area of global concern where its vast financial resources should be fully deployed.

Formidable US internal objections would have had to be overcome. So would the profound reservations of Europeans, to whom even the thought of the US and Japan cutting deals is anathema. But it would have been an initiative that perhaps only a new president of the US could have pulled off.

As it was, the cornerstone of the new bilateral coziness was mostly left to the friendship between the two men. This, according to believers in such chemistry, would surpass that enjoyed between President Reagan and Mr Yasuhiro Nakasone, Mr Takeshita's predecessor, and might even come to be comparable to that between Mr Reagan and Mrs Margaret Thatcher.

The problem is that ten weeks into the new year this personal foundation is looking a little shaky. Mr Takeshita has lost two more Cabinet ministers, as well as a few other pillars of the establishment, to the Recruit Cosmos debacle, which has acquired such a momentum that even the security of his own tenure is now in doubt. Mr Bush has failed to get his first choice installed as secretary of defence and is being forced to deny the argument that his administration has hit the ground crawling.

Both men, indeed, seem curiously afflicted by inertia at precisely the moment when their respective domestic and foreign audiences require a little action.

The Japanese case is perhaps a little more understandable. Mr Takeshita is the quintessential product of a political system which often works best by appearing inert. Mr Nakasone was a distinctive Prime Minister because he had ideas. But not all of them, by a long chalk, were implemented; and he was sufficiently different that if Recruit claims his scalp, which it may, he will probably find few defenders.

Most Japanese Prime Ministers would not lay claim to innovative pretensions. Mr Zenko Suzuki, from 1980 to 1982, may have been an extreme example of the passive tendency (few Japanese today can remember anything he said, why he was elected or even why he resigned) but he was not entirely out of character for a position with the principal role of keeping the show on the road.

Mr Takeshita, with no prior reputation for originality, was always likely to be best at problem solving of a conventional nature, such as the political reconciliations needed to get the long mooted tax bill through. But a crisis to the system itself, which is how the Recruit affair is being portrayed, is surely beyond his ken. As a senior lieutenant to Mr Kakuei Tanaka throughout the Lockheed scandal, he may well deep down believe that the storm will eventually blow itself out and that riding at anchor is the best response. The imaginative solution is not in his armoury.

People ask what Mr Bush actually wants to do with the presidency. A similar question is asked of Mr Takeshita

This, of course, is not the American way. Ever since FDR's first 100 days, presidents are supposed to bustle into action. Such is the contemporary personalisation of the office that anything less would be unacceptable. It also makes political sense, because new presidents do get honeymoons of uncertain duration (Mr Reagan's, remember, was extended because he was shot after three months in office).

Mr Bush's, perhaps, was always likely to be shorter than most, given his campaign promise not to raise taxes and the lack of an alternative consensus over how the pressing problem of the budget deficit might be resolved. But it is there to be used.

The honeymoon is not always unalloyed bliss. Mr Bush may be the first new president to have a Cabinet nominee actually voted down by the Senate, but others before him, including Mr Reagan, have seen appointees badly bruised or been forced to withdraw them. These tend to be short, sharp battles, forgotten if certain lessons are learned.

The quick shift from the dubious candidacy of Mr John Tower to the safe one of Congressman Dick Cheney suggests Mr Bush has not only read these danger signals but is also likely to get a Pentagon that is less of an independent power centre in the administration.

Some battles, however, are worth waging, on particular and general grounds. The word in Washington is that Senator Jesse Helms is preparing an *auto da fe* for Mr Larry Eagleburger, nominated as deputy secretary of state, on the charge of guilt by association with Dr Henry Kissinger, *bête noire* of the right wing.

Capitulating to Mr Helms, whose bark is worse than his bite but who expects to be thrown a few bones, is more than bad policy. It may be bad politics, in that one defeat is manageable but two threatens to become a trend. It did not help Mr Takeshita to lose cabinet ministers at quite the rate he did in January.

But this is not the real incipient worry about the new presidency. What is missing so far, gentleness and kindness apart, is much sense of what Mr Bush actually wants to do with the office. That lack eventually undid President Carter.

Though it may seem a bit rough that Mr Bush should be so tarred after only 50 days it is the way that the US capital works. It likes presidents to set terms and agendas. Mr Reagan and those around him understood this, to the point that Washington tolerated his afternoon naps, flights of fancy and even his association with Irangate.

The same questions, in a different context, are being asked of Mr Takeshita in Tokyo. Passing tax reform, like winning a presidential election, looks good on the programme but it begs the question of what is going to happen when the curtain goes up.

FINANCIAL TIMES
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Asean closes door to Vietnamese refugees

By Wong Sulong in Kuala Lumpur

MEMBER states of the Association of South-East Asian Nations (Asean) yesterday announced that from today all Vietnamese boat people arriving in the region would no longer be eligible for automatic resettlement.

The Asean "cut-off" date forms the first stage of a Comprehensive Programme of Action (CPA), hammered out by senior diplomatic and immigration officials from 35 countries, including Vietnam, in Kuala Lumpur last week.

The programme will be tabled at an international conference on Indo-Chinese refugees in Geneva in June, and if adopted is expected to provide a long-term solution to the continuing problem of Vietnamese boat people who are still landing in South-East Asia and Hong Kong by the thousands each month, 15 years after the Vietnam war.

The Asean statement, issued simultaneously in the six Asean capitals, said the cut-off date was necessary "to deter a mass exodus" of boat people from Vietnam in the interval between last week's Kuala Lumpur preparatory meeting and the Geneva conference.

It said all boat people arriving from today would continue to be given temporary asylum and accorded humanitarian treatment consistent with the principles and practices to be decided at the Geneva conference.

However, they would not be eligible for automatic resettlement in third countries. Instead, new arrivals would undergo tough screening tests and those found to be economic refugees would be told they had the option of returning to Vietnam voluntarily, or remaining permanently at a camp with no hope of resettlement.

Commenting on the Asean cut-off date, a senior Western diplomat in Kuala Lumpur said: "The effectiveness, or lack of it, would be seen very soon. These Vietnamese have an extremely wide and well-informed network. If they believe the Asean states are serious, and they do not qualify as political refugees, they will not come out." As part of the compromise package deal, reached at the Kuala Lumpur meeting, Western nations will step up their resettlement programmes to clear an estimated 70,000 Vietnamese refugees, currently in camps in South-East Asia and Hong Kong.

Hanoi, for its part, promised to crack down on illegal departures by sea and to step up its orderly departure programme. It also promised that refugees who returned voluntarily would not be punished.

Diplomats in the region feel Hanoi's new attitude stems from its desire to end its international isolation, and to establish normal diplomatic and commercial ties with its South-East Asian neighbours.

Vietnam chases the peaceful tiger

John Elliott on attempts at economic reform after decades of war

TAKE e country with one of the world's lowest per capita incomes but one of Asia's highest levels of literacy, located on international air and sea routes in a booming economic region where businessmen are urgently looking for factory locations with cheap bnt intelligent labour.

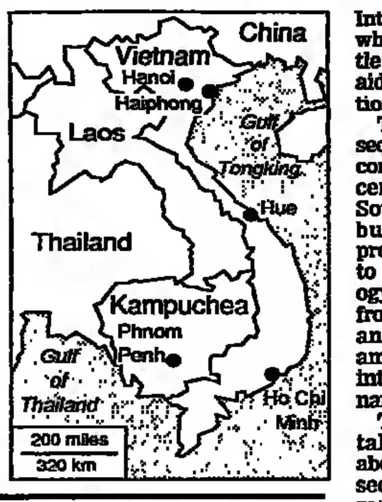
Add a population emerging from the ravages and trauma of decades of war and communist doctrine with a dilapidated economy bnt a leadership determined to strike out on a more open and capitalist-orientated path.

That is Vietnam today as it prepares to withdraw its last 50,000 troops from Kampuchea, maybe as early as this June. Its leaders hope this will be followed by foreign aid and investment tbat will enable Vietnam to become one of south-east Asia's 1990s generation of "tiger" economies.

Apart from being an improbably tall order for a country that has known little else but war this century, its leaders face strong opposition and obstruction from diehard conservatives, entrenched bureaucrats and incompetent middle-level cadres and managers who have blocked many reforms. Even keen supporters of the reform policies launched in 1986 by Mr Nguyen Van Linh, the country's 74-year old Communist Party chief, sometimes admit to personal agonising.

Mr Nguyen Co Tach, the Foreign Minister, talks of "us all fighting with ourselves." One of the Government's top economic advisers speaks openly but anonymously ebout "our extremely rocky path" in redefining the country's approach to Marxism so that it can "move from the dialectics of the past to the realities facing tbe country." He condemns "the centre" for "trying to neglect market mechanisms" and for sticking to an economic model which was "suitable for a country in time of war but which fails to satisfy the demands of the population in peacetime."

Nguyen Van Linh: trying to wrest power from diehards



To try to wrest power from the diehards and to give the reforms a push, Mr Linh has called a plenary meeting of the Communist Party's powerful central committee later this month. It will pass a draft policy document setting out fresh targets for streamlining ministries, cutting state intervention and delineating the power and authority of the party, national assembly and individual ministries.

Mr Linh will make clear that, despite rumours encouraged by conservatives of his ill health and early retirement, he is well and intends to stay on until tbe end of next year when the party will hold its seventh congress – the first since the economic reforms were launched in 1986.

He is also expected et the meeting this month to reduce the power of his opponents and streamline the Government by cutting the number of vice-premiers from six to two or three. In a reshuffle of economic ministers earlier this month he promoted a possible future party boss, Mr Pham Van Kai, from mayor of Ho Chi Minh City (formerly Saigon and the engine of Vietnam's hoped-for economic recovery) to head of the State Planning Commission.

The economic recovery will be difficult. Vietnam had an inflation rate of 700 per cent last year. It has run a rate of about 300 per cent for several years, and regards the monthly figure for January of 7 per cent as a substantial if temporary improvement. The gross national product per head is estimated to be between US$120 and $200 (the Government backs the higher figure), which makes it one of the poorest countries in the world.

The 65m population is growing at 2.4 per cent a year, which is far too high for a 6 per cent GNP growth rate and for a country with relatively scarce arable land. As a result, there are serious regional problems of malnutrition, worsened hy an inadequate transport system's failure to shift rice and food grains around the country.

International debts total $9bn, incinding $7bn to the Soviet Union which provides $2bn aid a year, 80 per cent of it in barter trade which is never balanced and 20 per cent in grants. Debts to the West total the other $2bn, including $130m outstanding with the International Monetary Fund, which Vietnam is trying to settle to clear the way for fresh aid and an improved international credit rating.

These problems are the consequence of decades of wars, communist doctrine and e concentration of investment in Soviet-financed and Soviet-built large-scale, inefficient projects. Now Vietnam wants to turn to the West for technology, management and finance from countries such as Japan and Australia which are among those showing most interest in cashing in on Vietnam's natural resources.

Top government advisers talk in Thatcherite terms about the need to make public sector businesses financially responsible and to sack inefficient managers. Such reforms are hard to implement in a communist conntry but there has been some success in setting up private sector enterprises as competitors.

So far the reforms have attracted little foreign investment – only $130m last year, excluding oil exploration. New laws developed over the past 18 months offer some of Asia's best inducements in terms of equity allowed, tax breaks and repatriation of profits.

People in Hanoi talk of a new openness and there are few obvious signs of an oppressive communist regime. Private sector shops, restaurants and bazaar stalls open with almost each new day and shelves are becoming increasingly well stocked with consumer goods, albeit Soviet ones that look like west European products of the 1950s.

There is a definite mood of change, despite the opposition to reforms. Next year is the 100th anniversary of the birth of Ho Chi Minh, the father of the country, and the celebrations of this event will coincide, Mr Linh and his supporters hope, with the launch of what the advisers are calling the "post-Kampuchea economic era."

Köhl faces uncertain future after latest poll defeat

By David Marsh in Bonn

MR Helmut Köhl, the West German Chancellor, was distinctly subdued yesterday at a Bonn press conference as he fielded unusually tough questions over his future following the conservatives' election setback in Hesse.

Mr Köhl admitted his Christian Democratic Union (CDU), the dominant party in the centre-right coalition, was in a "serious situation" after renewed fragmentation of the vote in the Hesse municipal poll.

Mr Köhl reaffirmed that the CDU ruled out any kind of co-operation with the far-rigbt National Democratic Party (NPD), which gained strongly in the weekend voting.

He said the Government would be stepping up efforts to curb intake of asylum-seekers from the Third World and Eastern Europe. The tide of immigration has benefited the far right by exacerbating anti-foreigner sentiment in West German towns and cities. But Mr Köhl pointedly left open how the objective of controlling inflows could be achieved.

Monday post mortems after a Sunday election blow hsve become a habit for the Chancellor. The fall in CDU support in Hesse was the latest in a long series of regional elections reverses for the CDU since Mr Köhl won the last general election, with a sharply reduced majority, in January 1987.

Just six weeks after being ousted from the state government in West Berlin, the CDU on Sunday was ejected from 12 years of control over Frankfurt, West Germany's sixth largest city, amid another large swing to radical parties on the left and right.

West German politics has become markedly more volatile in recent years. The mid-term anti-CDU protest vote does not necessarily offer a sound guide to what will happen in the next general election in December 1990. None the less, Mr Köhl's chances of remaining in power with his present coalition partners, the liberal Free Democratic Party (FDP), look a good deal less secure than even a few months ago.

West Berlin and Frankfurt look likely to be ruled by coalitions formed by the Social Democratic Party (SPD) and the Greens ecology grouping. The election results confirm that a basic change in the political landscape is under way. West Germany now has a de facto five party system. It is one in which the establishment parties of the CDU and the SPD find life a lot less comfortable.

These two "catch-all" parties have dominated West German politics since the country was established in 1949. But they have both seen their share of the national vote dwindle significantly over the past few years.

The Federal Republic's sheer prosperity seems to have been a factor turning the electorate away from the mainstream parties in search of new goals. The CDU and SPD appear to have lost touch with the people. They have extended their bureaucracies and tried to spread their policies over too wide e sweep of issues. They are now paying the price of lost credibility.

In the middle of the spectrum, the FDP, which has taken part in Bonn coalitions in all but seven of the Federal Republic's 40 years of existence, is squeezed from all sides. Not for the first time in its history, the party must be seriously worried whether it will remain represented in the Bundestag after the next general election.

The greater complexity of electoral arithmetic has brought an overall advantage for the SPD. It can still make a mess of "Red-Green" coalitions in Berlin and Frankfurt. But it has as the choice of possible coalition partners in both the Greens and the FDP.

The Christian Democrats have been presenting a sorry spectacle lately. They have been struggling through a welter of unpopular decisions in areas ranging from defence and the budget to immigration and reforms of the country's generous pensions and social security systems.

In a generally well-managed, wealthy country like West Germany none of this should be causing any fundamental threat to the political system. The doubts about political stability which have come to the surface after the Hesse and Berlin elections may well be exaggerated, but they underline how West Germany is still saddled by a burden of history which has become no less onerous over 40 years.

Change of tack puts Hesse CDU on the rocks, Page 3

THE LEX COLUMN

Glaxo's ring of confidence

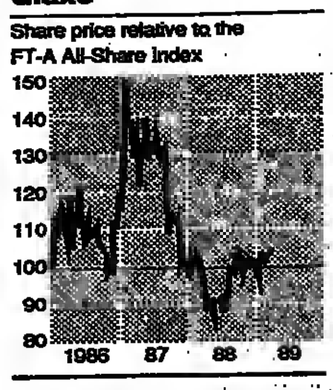
Mr Lawson's performance today will he followed with particular attention by an equity market poised above 2,100 for the first time since the crash. The state of the real economy is unusually hard to read: bnt yesterday's strong retail sales figures met with general scepticism, and were at odds with a gloomy forecast from the leading transport group TDG.

Glaxo

The market still has a good deal of hope invested in Glaxo, and yesterday's 38p jump in the shares owed more to a general sense of relief than to anything specific in the interim figures. The key still lies in the transition from Zantac, as source of half group profits, to a broader and less risky spread of innovative drugs in the early 1990s. There have been worries lately about the threat from a new kind of ulcer drug, which has the formidable backing of the one company which Glaxo still has to look up to, Merck of the US. But while much may depend on Wednesday's meeting by the US regulatory anthorities to rule on the drug's use, Glaxo professes confidence that it will be restricted to a narrow band of severe cases.

Meanwhile, the 43 per cent jump in the interim dividend is a clear reminder that the profits piled up in Zantac's early days are there to help shareholders over the transitional phase. Allowing for some adjustment between interim and final, the implication is that the company can match last year's growth in total payont of 30-odd per cent for several years to come. This would put the prospective yield at over 3 per cent, backed up by a cash pile now at £1bn net and growing.

It is the more striking to hear the company assert that it will not become a yield stock: that before then, the new drugs will be kicking in to such effect that the shares will be back on a growth rating. At a 25 per cent premium to the market, they are arguably there already. But on a long view, they could be worth more again.



Venture capital

The sooner someone redefines the UK venture capital indnstry,and dehunks the myth that it is full of brave investors taking high risks in return for high returns, the better. The idea that management buy-outs of established businesses such as MFI and BPCC should be lnmped together with investments in start-up high technology companies is a joke. The former have low operational risk and stable cash flow, while the latter have high operational risk and often a negative cash flow. Yet they are all lumped together and make the £1.4bn invested in 1988 by members of the British Venture Capital Association (BVCA) sound rather impressive.

However, while the smart UK money is pouring into relatively safe management buy-outs, it is shunning the higher risk investments which will create the companies of tomorrow; and the BVCA is more than a little concerned. If management buy-out groups such as Candover Investments can earn their investors an average return of 60 per cent per annum throughout most of the last decade, then it is hard to see why institutions should be attracted into the real venture capital industry – providing development capital for companies many years away from an easy stock market float. It is just as hard as ever to raise £300,000 for a brand new idea.

Thorn EMI

In the context of the £300m Thorn EMI spent on Inmos, the final indignity of paying $10m to have it carted away is probably neither here nor there. The market has viewed Inmos as an unadulterated liability for so long that getting rid of it was all that mattered, and yesterday's deal with SGS-Thomson ensures just that. Inmos will need money in future, and some of it will come from Thorn via its commitment to take part in future SGS-Thomson rights issues. But Thorn's liability will never exceed revenues from the chip patents it has retained, and will not in any case top $30m; and the embarrassment will be further reduced by the fact that unlike the liabilities, the revenues will show up on the P&L account.

Thorn is selling this as the best of all possible deals; and though shareholders might have preferred something by way of return on their £300m, the consolation of knowing they will never be touched for more is not inconsiderable. And though it is academic to speculate on the value of Thorn's stake in a company which is making next to nothing and consumes lots of Franco-Italian cash, there is no doubt that its future as an investment has been enhanced by including Inmos. The bottom line is that Thorn should be worth more without Inmos than with it; but that may be no revelation to a market which already has the shares on an average rating.

Pentland Industries

When Reebok was a wonder stock, the deformity that its growth inflicted on its biggest shareholder was masked. Now that Reebok is faltering, Pentland Industries is struggling to hide its ugliness. Despite the management's sterling efforts – shown in yesterday's 45 per cent increase in non-Reebok earnings and 136 per cent increase in the dividend – it is not obvions why Pentland should continue to exist at all.

On one hand, increasing the divdend simply passes on Reebok's cash, giving the UK taxman something on the way; while the advance in Pentland's own businesses cannot alter the fact that Reebok and a pile of cash still dominate the whole. The value of Pentland broken up must be at least 115p (assuming a conservative p/e of 6 on the non-Reebok bits, and full CGT on the sale of the Reebok stake) and even after yesterday's 7p rise, the share price is almost 20 per cent less than that.

As the remedy cannot be a takeover, and as the majority shareholder is not likely to wind up his own company, the best hope must be that Pentland will find another winner. But finding a hargain among over-priced hranded goods companies will not be easy. The fact that Pentland has underperformed Reebok by more than half in the last two years suggests the market is no longer particularly optimistic.

Bolívar devalued as Venezuela introduces single floating rate

By Joseph Mann in Caracas

VENEZUELA yesterday replaced its long-standing dual exchange rate with a single floating rate in what amounted to a big devaluation of the bolivar.

The move is a key element in the Government's economic adjustment programme unveiled on February 16. Earlier this month the country was shaken by riots and looting sparked by a series of price increases introduced under this programme.

The bolivar has been trading at 40 to the dollar on the free market against the official exchange rate of 14.5. The devaluation is likely to add to the problems of President Carlos Andrés Pérez in the wake of the riots because Venezuela depends heavily on imports for industrial components and foodstuffs. The private sector also fears lay-offs and plant closures in the face of steeper import bills.

Although Mr Pérez said Venezuela would end its dual exchange rate almost a month ago, his Administration has had to delay implementation, largely because of a shortage of liquid monetary reserves.

Government-owned companies accounted for about 85 per cent of last year's export receipts of $10.4bn. Thus, the Government itself will have to supply almost all dollars sold on the domestic foreign exchange market until Venezuelan companies begin earning substantial sums from exports, or until Venezuelan citizens begin repatriating some of the estimated $30-$35bn they hold offshore.

The last important devaluation of Venezuela's currency took place in December 1986, when the previous government increased the official rate of 7.5 bolivars per dollar to 14.5.

Ms Eglee Iturbe, the Finance Minister, said over the weekend that the Government would help ease the problems of certain Venezuelan importers holding a total of $6bn in outstanding letters of credit.

The plan, designed to share the foreign exchange loss with private business, is based on the date when merchandise entered the country. It grants foreign exchange at the old official rate of 14.5 bolivars per dollar for all imports that entered the country before May 31 1988. Other imports arriving between May 31 and October 31 1988 will be eligible for dollars at the official rate on a sliding scale that ranges from 83 to 17 per cent of the total credit involved.

Letters of credit for merchandise entering Venezuela after October 31 1988 must be settled with foreign exchange purchased on the free market.

Last week, spokesmen for private industry rejected the Government's letter-of-credit plan, warning it would lead to financial losses and bankruptcies.

Fresh challenge to Botha by de Klerk

Continued from Page 1

tion of the serving state president, be promoted in consultation with the cabinet and the state president."

The cabinet is due to meet on Wednesday with Mr Botha in the chair for the first time since his stroke on January 18.

MPs and senior party officials are angry because, by refusing to hold early elections, Mr Botha may be sacrificing an excellent election opportunity for the party in the interests of keeping personal power.

"The party's view is always more important than the view of any individual because it is the party which has been endorsed by the electorate," Mr Con Botha, the National Party's director of information, said last night.

In his televised interview, Mr P.W Botha denied the existence of a rift with Mr de Klerk. He said he had personally appointed him to senior party and government positions "because I have faith in him, I get on with him."

WORLD WEATHER

		°C	°F			°C	°F			°C	°F			°C	°F
Ajaccio	[illegible]	[illegible]	[illegible]	Dubrovnik	[illegible]	[illegible]	[illegible]	Malta	[illegible]	[illegible]	[illegible]	Rhodes	[illegible]	[illegible]	[illegible]
Algiers	[illegible]	[illegible]	[illegible]	Edinburgh	[illegible]	[illegible]	[illegible]	Manchester	[illegible]	[illegible]	[illegible]	Rio de Ja	[illegible]	[illegible]	[illegible]
Amsterdam	[illegible]	[illegible]	[illegible]	Faro	[illegible]	[illegible]	[illegible]	Manila	[illegible]	[illegible]	[illegible]	Rome	[illegible]	[illegible]	[illegible]
Athens	[illegible]	[illegible]	[illegible]	Florence	[illegible]	[illegible]	[illegible]	Melbourne	[illegible]	[illegible]	[illegible]	Salzburg	[illegible]	[illegible]	[illegible]
Bahrain	[illegible]	[illegible]	[illegible]	Frankfurt	[illegible]	[illegible]	[illegible]	Mexico City	[illegible]	[illegible]	[illegible]	San Francisco	[illegible]	[illegible]	[illegible]
Barcelona	[illegible]	[illegible]	[illegible]	Funchal	[illegible]	[illegible]	[illegible]	Miami	[illegible]	[illegible]	[illegible]	Seoul	[illegible]	[illegible]	[illegible]
Beirut	[illegible]	[illegible]	[illegible]	Geneva	[illegible]	[illegible]	[illegible]	Milan	[illegible]	[illegible]	[illegible]	Singapore	[illegible]	[illegible]	[illegible]
Belfast	[illegible]	[illegible]	[illegible]	Gibraltar	[illegible]	[illegible]	[illegible]	Montreal	[illegible]	[illegible]	[illegible]	Stockholm	[illegible]	[illegible]	[illegible]
Belgrade	[illegible]	[illegible]	[illegible]	Glasgow	[illegible]	[illegible]	[illegible]	Moscow	[illegible]	[illegible]	[illegible]	Strasbourg	[illegible]	[illegible]	[illegible]
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Bordeaux	[illegible]	[illegible]	[illegible]	H. Kong	[illegible]	[illegible]	[illegible]	Naples	[illegible]	[illegible]	[illegible]	Tel Aviv	[illegible]	[illegible]	[illegible]
Boulogne	[illegible]	[illegible]	[illegible]	Innsbruck	[illegible]	[illegible]	[illegible]	Nassau	[illegible]	[illegible]	[illegible]	Tenerife	[illegible]	[illegible]	[illegible]
Bristol	[illegible]	[illegible]	[illegible]	Inverness	[illegible]	[illegible]	[illegible]	New Delhi	[illegible]	[illegible]	[illegible]	Tokyo	[illegible]	[illegible]	[illegible]
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Budapest	[illegible]	[illegible]	[illegible]	Istanbul	[illegible]	[illegible]	[illegible]	Nice	[illegible]	[illegible]	[illegible]	Tunis	[illegible]	[illegible]	[illegible]
B. Aires	[illegible]	[illegible]	[illegible]	Jersey	[illegible]	[illegible]	[illegible]	Nicosia	[illegible]	[illegible]	[illegible]	Valencia	[illegible]	[illegible]	[illegible]
Cairo	[illegible]	[illegible]	[illegible]	Jo'burg	[illegible]	[illegible]	[illegible]	Oporto	[illegible]	[illegible]	[illegible]	Venice	[illegible]	[illegible]	[illegible]
Cape Town	[illegible]	[illegible]	[illegible]	Karachi	[illegible]	[illegible]	[illegible]	Oslo	[illegible]	[illegible]	[illegible]	Vienna	[illegible]	[illegible]	[illegible]
Casablanca	[illegible]	[illegible]	[illegible]	L. Palma	[illegible]	[illegible]	[illegible]	Paris	[illegible]	[illegible]	[illegible]	Warsaw	[illegible]	[illegible]	[illegible]
Chicago	[illegible]	[illegible]	[illegible]	Lisbon	[illegible]	[illegible]	[illegible]	Peking	[illegible]	[illegible]	[illegible]	Washington	[illegible]	[illegible]	[illegible]
Cologne	[illegible]	[illegible]	[illegible]	London	[illegible]	[illegible]	[illegible]	Perth	[illegible]	[illegible]	[illegible]	Wellington	[illegible]	[illegible]	[illegible]
Copenhagen	[illegible]	[illegible]	[illegible]	Los Angeles	[illegible]	[illegible]	[illegible]	Prague	[illegible]	[illegible]	[illegible]	Zurich	[illegible]	[illegible]	[illegible]
Corfu	[illegible]	[illegible]	[illegible]	Luxembourg	[illegible]	[illegible]	[illegible]	Reykjavik	[illegible]	[illegible]	[illegible]				
Dallas	[illegible]	[illegible]	[illegible]	Madrid	[illegible]	[illegible]	[illegible]								
Delhi	[illegible]	[illegible]	[illegible]	Majorca	[illegible]	[illegible]	[illegible]								
Dublin	[illegible]	[illegible]	[illegible]	Malaga	[illegible]	[illegible]	[illegible]								

Figures at mid-day yesterday
C-Cloudy Dr-Drizzle F-Fair Fg-Fog H-Hail R-Rain S-Sun Sl-Sleet Sn-Snow T-Thunder

Soviet failures shown

Continued from Page 1

built up in Vorkuta, part of a nationwide backlog of a 36m tonnes, the report said.

Mr Shchadov immediately ordered that the bonus arrears should be paid from ministerial funds, and also ordered a change in the system of salary scales and production quotas.

But he insisted that the workers themselves should deal with their other demands.

Mr Shchadov condemned the workers' action, but they were far more damning about the local bureaucracy. He also admitted that his ministry failed to "sense the pulse of a tragedy brewing."

Mr A. F. Chebotayev, secretary of the central committee of the Mineworkers' Union, admitted that the union had simply given up any attempt to intervene.

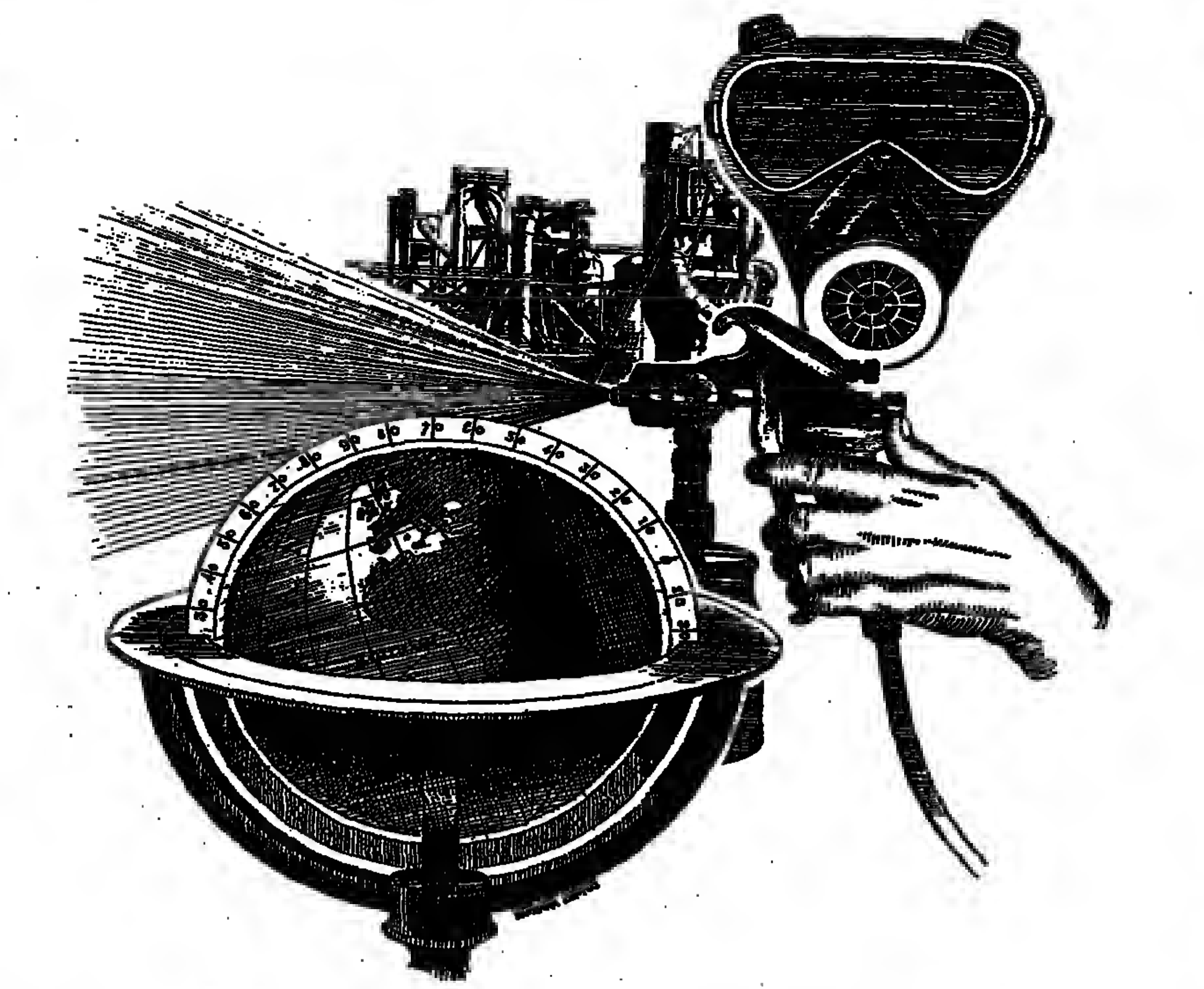
"Have there been any cases of the trade union committee intervening to protect the interests of workers in conflict with the heads of mines and enterprises?" the newspaper asked.

"I do not know of any such cases," the trade union leader replied.

SECTION III
FINANCIAL TIMES
SURVEY

Numbers of paint makers are in sharp decline as the giants buy up smaller businesses to increase their global spread or share of niche markets. By 1995 half the world's paint may be made by only 10 big companies, as **Ian Hamilton Fazey** reports

Victors spoil for empires



PAINTS & COATINGS
THE WAR FOR WORLD MARKETS

WARFARE IS not too strong a word for what is going on in the world's £20bn market for paints and coatings. After seven years of unprecedented activity in mergers and acquisitions, the major protagonists have emerged and are building global and continental empires. They are gobbling up other large or medium-sized companies to build market share quickly; they are buying smaller companies for footholds and local knowledge in new markets to outflank their competitors.

The long term effect will be on control of technology and markets. There are about 10,000 producers worldwide but a combination of takeovers, increasingly high technology, rising raw material costs, price wars, and tighter environmental controls has been taking its toll.

In 1980 the ten largest paintmakers in the world held less than 20 per cent of the global market between them. By 1987, this figure was 30 per cent – and of a growing market, since paint consumption varies with gross national product.

ICI's futurologists now predict that the top ten paintmakers will have half the world market by 1995, controlling markets which impinge on people's lives more than most realise.

The current top ten are listed in the chart at the right of this page. ICI (1st), PPG and BASF (equal 2nd), Akzo (5th) and International (7th) are the most acquisitive climbers. In 1979, their respective positions were 4th, 1st, 5th, 7th and 9th.

To get where they are now, ICI and BASF took over the US companies which occupied 8th and 10th places in 1979 – ICI swallowing Glidden and BASF beating off both Akzo and ICI to buy Inmont. Acquisitions by PPG and International have been of smaller, national operators in specialised global markets, which have then formed the basis for growth.

Most people think of paint as the stuff they buy in cans at the nearest do-it-yourself retail shed. Half of the paint made in the world comes into this category of "decorative" products – almost a commodity, produced in high volume, and marketed hard to consumers.

The other half comprises increasingly complicated coatings. These are the complex polymers that go on ships, yachts, planes and trains, on cars, or on the inside of cans to provide a safe, inert barrier between contents and metal.

These are the paints for refrigerators, washing machines, microwave ovens, oven-proof pots, electric toasters, filing cabinets, drilling rigs, oil drums, window frames (metal or wood), or fighter planes to change their radar "signatures."

Indeed, there are thousands of applications, each of a coating which confers more important properties than mere decoration – such as protection from corrosion, abrasion resistance, or the ability to withstand high temperatures or wet weather. More importantly they add value and are needed universally: paint is a basic industry with more than dash of colour to it.

The dash for world power has been customer-driven. The manufacturers of the products requiring the highest technology in their coatings – cars and cans are the most important examples – operate globally. They therefore want global suppliers, or at least global standards of supply.

Cars must look attractive and stay rust-free for as long as possible, whether made in Cowley or Knala Lumpnr, Detroit or Osaka. Coca Cola or Castlemaine XXXX must taste the same the world over – and that comes down to the taste-free lacquer lining the can.

Within the top ten, however, a new hierarchy is emerging. Only four companies can claim a truly global spread – ICI, PPG, BASF and International. Of these, only ICI of the UK, PPG of the US and BASF of West Germany are well balanced in terms of both geographical spread and market sectors served.

International's is niche business for painting ships – out of which has come a skill in multinational industrial marketing which is now being applied globally to the emergent new technology of powder coatings.

The other members of the top league are regional players. Though most also have subsidiaries overseas, the bulk of what they do is near home. They are at a disadvantage in selling their own paints to put on global products, but fight their bigger competitors in the regional marketplace through licensing other paintmakers' products.

Within Europe in particular, other large operators are emerging, notably Beckers, the Swedish champion, and the Williams Group of the UK, which has acquired both Crown and Berger, previously the country's second and third biggest paintmakers.

Ms Helma Jotischky of the Paint Research Association says that the significance of the ensuing Crown-Berger merger cannot be overestimated. It resulted in the closure of Berger's Bristol factory and triggered a restructuring of the UK's decorative market which is still going on.

Rationalisation saw Kalon close down in Lancashire and retrench to Leeds, streamlined for the coming fight. Beckers sold its UK Valspar decorative paint licence to Macpherson, which had already bought Signpost Paint and was thus quickly off in pursuit third place in the UK behind ICI and Crown.

Beckers, in effect, retrenched into industrial coatings. The company is particularly strong in coil coatings, where coils of steel or aluminium strip are painted with such tough polymers that they can be cut into sheets and then bent, formed or stamped into almost any shape of metallic component, eliminating the need for factory paint shops.

The Hoechst chemicals group – the third largest paintmaker in the world in 1979 – did likewise, since it was the vendor of Berger, its decorative paint arm. The group is concentrating on automotive and other specialised paints through Herberts, its subsidiary.

The only hope for smaller companies in all this is to lead in tight little high technology niches. Some have been able to do this almost worldwide, using guerrilla tactics against the giants. Thus, in the UK, Sonneborn and Rieck, a wood coating specialist, moved into painting plastics as synthetic materials started replacing wood in consumer goods like television sets. It has a world niche – through direct exports and licensing – as a result, despite turning over only £18m a year.

Similarly, the Grebe Group of West Germany, which is about three times bigger, is so confident about its high performance, coil and other speciality coatings that Weilburger, its subsidiary, will shortly open a new factory in Runcorn for the UK market – and this is an industry where the giants have been struggling with overcapacity.

The large companies are hoping to win more ground long term, however, through what Dr Jurgen Kammer, head of BASF's paints business, calls the environment-technology spiral. Pressure on the chemicals industry generally is mounting from the environmental lobby and politicians are taking notice. New standards are likely on solvent emissions from paint shops, effluent disposal, and the toxicity of new products. Once reached, new standards are set, and so on, so that they spiral upwards over the years.

The spiral will hit paintmakers hard – especially since the standards will probably be German, conceded where the Green lobby is strongest. Capital will have to be found to upgrade paint factories, develop new paints, improve production processes and change application methods among industrial customers.

Combined with rising raw material costs and lagging prices – which the giants are keeping down as a weapon in their war with each other – smaller paint companies will continue to keep the specialists in mergers and acquisitions busy. Target businesses will probably move from the £30-£50m turnover range as low as £10m as big companies seek to mop up niche markets. The next few years could be as frenetic as the last seven.

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Graphics by Bob Hutchison

World league table

1988 approx. volumes (m litres)

1 ICI	UK	780
2 PPG	US	460
BASF	W Germany	460
4 Sherwin-Wms	US	360
5 Akzo	Netherlands	350
6 Nippon	Japan	257
7 International	UK	235
8 Kansai	Japan	231
9 DuPont	US	228
10 Valspar	US	200

Sources: BASF, ICI, Nippon, International, Kansai & industry estimates

Peter Marsh examines the chemical industry connection

A web of cross-links

A CLOSE look at the major players in the world's paints and coatings industry provides a a graphic illustration of the web-like connections that bind the different parts of the chemicals business generally.

The paints sector, with sales of about £20bn a year worldwide, is only a tiny component of the chemical industry whose total sales are more than 20 times larger.

Yet such is the tightly-integrated nature of the chemicals sector that many of the biggest paints companies are either part of still larger chemicals conglomerates or are bound strongly to these gronps by their requirements for raw materials.

All the world's top five chemicals companies – BASF, Bayer and Hoechst of West Germany, Britain's Imperial Chemical Industries and the US's DuPont – are highly important in the paints and coatings sector, either because of their sales of finished products or because they are big suppliers of the resins, pigments, solvents and other materials which are important in paints manufacture.

Other big chemicals groups which also have a strong position in this field, either as a supplier of raw materials or through selling finished goods, include Holland's Akzo and Ciba-Geigy of Switzerland.

The paints business, despite its relatively small size, in many ways reflects some of the changes taking place in chemicals generally.

The chemicals sector is currently passing through a stage of healthy growth after problems in the early 1980s caused by overcapacity and lack of demand for many basic synthetic materials. It has emerged from this difficult period partly by good fortune – the world's economy happened to improve at just the right time to help the industry out of recession – but also by sharpening up its marketing and aiming products at increasingly specialised sub-sectors of industry.

In a similar way, paints companies have become in recent years increasingly eager to look for small, specialised markets in the paints and coatings field in which a particular product, backed up by a strong element of customer service, can command a premium price.

Examples of this emphasis on higher-value areas of paints include the way the big companies in this field are increasingly targeting automotive coatings as a major growth area.

As examples of this approach, ICI and BASF are placing great emphasis in their US operations on setting up applied research centres for paints and coatings that are situated close to the big US Detroit-based car gronps. Hoechst, too, is keen on the automotive paints market and recently sold its decorative paints business to concentrate on this field.

Similarly specialised applications areas for paints and coatings can be seen in a variety of other fields.

These inclnde corrosion-proof coatings for marine structures and paints which reduce the radar signatures of missiles or aircraft in the defence industry.

Another emerging application area is polyurethane-based coatings used to give a tough, rigid film on top of various types of plastics. Companies like Bayer, ICI and the US's Dow Chemical are among the leaders in such polyurethane applications.

The overall switch towards increasing specialisation in demand for paints and coatings feeds into the need for an increasingly complex and *flexible* mix of materials which are the ingredients of the finished product.

That automatically places the large, highly integrated chemicals companies – which can make a huge variety of synthetic materials from a relatively small number of basic feedstock substances – in a good position in raw material supply for paints.

Specific raw materials which are important in this area include basic plastics such as polyethylene and polypropylene. These form the starting products for many of the resins used as basic ingredients in paints.

From similar feedstocks can be turned out a variety of thickeners, dispersion chemicals and wetting agents that may be needed in a number of different forms depending on the exact application. All the world's big five chemicals producers are large-scale suppliers of these types of material.

There is room, too, for smaller companies which can cover particularly specialised sectors of the market. Thus Henkel, the fourth biggest German chemicals company, and Hercules, a US chemicals group, have joined forces to form Aqualon, a company which is making special water-soluble polymers for coatings applications.

Other particular raw materials which are important in paints production include acetic acid, a material of which Hoechst and and British Petroleum, another big chemicals group, are the world's top two suppliers. Acetic acid is the basic precursor for vinyl acetate, a vital ingredient of emulsion paint.

Another widely used substance in paints is titanium dioxide, used as a whitening agent. Here the world's biggest suppliers include several companies that are also significant players in paints. These suppliers include Du Pont, Bayer and ICI (which has a joint venture in tioxide production with Cookson, a UK materials group).

Perhaps one of the most specialised areas of paints production lies in the manufacture of coloured organic pigments. This area of industry adds up to world sales of about $2bn and includes as major players large chemicals groups including Ciba-Geigy, BASF, Hoechst, Bayer and Switzerland's Sandoz.

Other groups heavily involved in organic pigments – which are based on a variety of materials and which have strong links with both the inks business and the manufacture of dyestuffs used in textiles – include Toyo Ink and Dainippon Ink, both of Japan.

SINGLE EC MARKET

Green issues loom darkly

THE APPROACH of the single European market in 1992 may be more of a threat to the bulk of the paint industry than an opportunity. Indeed, for many the opportunity has already happened – and the threat is looming menacingly ahead of time in the shape of the raised political profile of green issues.

The latter holds the key to events. Standards of health, safety and environmental protection are already getting tougher in anticipation of pan-European harmonisation in 1992. By then, most of the changes needed will probably have happened.

Last week Dr Frank Rose reported that to the last six months 72 items have been published by various branches of Government, tightening up laws and standards. They ranged from statutory instruments to new codes of practice and health and safety regulations – and there were nearly 15 times as many of them than in any previous six-month period.

Dr Rose, who is ICI's medical advisor and general manager for health, safety and the environment, was addressing the Industrial Coatings Conference of the UK Paintmakers Association.

Some attending wanted the association to form a committee, appoint consultants to advise on the issues, and ensure that UK paintmakers took the driving seat on setting standards. But by the end of the day, realisation had dawned on most that it is much too late for that.

"The committees are formed and the Germans and the French are imposing their standards on the rest of Europe," Dr Rose said. "They are doing it because they know they can live with tougher controls. We are not doing enough about it. We have to individually and collectively get up and fight."

He did not mean stopping the movement to better standards, but ensuring enough UK input not to be merely at someone else's mercy and forced to accept possibly unreasonable regulations designed for their local circumstances and stronger minority green pressure groups.

Environmental pressures on the paint industry affect almost all aspects of the business. They *impinge* on what goes into paints and coatings, how they are made, how effluents are disposed of, and the application methods used by consumers and industrial customers.

Technical developments of environmental benefit include using water rather than organic solvents as the medium to carry the pigments and resins that comprise paint. This reduces the emission of organic solvents into the atmosphere as coatings dry - where they break down in sunlight to form some of the constituents of acid rain. If water is the solvent there is no problem.

Some paint is already on its way to being designated a Class One human carcinogen, requiring tight codes of practice to any workplace where people are exposed regularly. Companies already take care, but new regulations can only be tougher.

Dr Rose predicted that new products will have to pass ever more rigorous toxicity tests before paintmakers will be allowed to market them. Simple decorative paint – in the familiar cans that people buy at various retail outlets – is least affected, but industrial coatings, which have to add much more value and confer marketable properties on the surfaces they cover, are more complicated and will come under constant and closer scrutiny.

> **"The Germans and the French are imposing their standards on the rest of Europe."**

Moreover, the pressure is not all coming from regulators, for the green issue is now being exploited in consumer marketing. The conference was shown how the Tesco supermarket chain is leading the UK's retailers in putting "environmentally safe" or "pollntant free" labels on goods. Suppliers who cannot meet the company's standards have already been dropped.

Whether to treat the greening of European perceptions as a threat or opportunity depends largely on who you are as a paintmaker and how financially sound.

BASF is setting the pace here; driven by ever-tighter West German regulations in its home market, it is now looking to use its massive capital spending programme – DM200m already, with DM1bn committed by 1993 – to marketing advantage.

Conference delegates pointed out that many smaller and medium-sized paint companies face exactly the same pressures all over Europe and will find it just as difficult to follow the BASF lead whether they are in the UK, France or West Germany. However, they also concluded that this will help the big paintmakers with deep financial resources. With paint prices depressed, margins under pressure, and industrial customers trying to trim costs further, some medium- sized and smaller paintmakers are beginning to get worried – especially with the continuing pressure of raw material price rises.

The cost of compliance with tougher environmental controls will threaten the survival of some, as non-working capital has to be found for factory improvements, extra research and compulsory testing to win approvals.

Some suspect that the paintmaking giants may even be prepared to live with tight margins, knowing this will speed the rationalisation of the industry as its smaller members are forced to sell if they occupy a desirable niche – or close down if they do not.

Contrary to the Government's wishes, 1992 is not seen by many smaller paintmakers as the great opportunity presented to the conference by a civil servant from the DTI in a flood of propaganda and freefone contact numbers for leaflets. The debates which followed revealed little other than deep-seated worries.

Why 1992's opportunities have already happened is because of the nature of the industry. The larger companies have already formed their cross-border structures, many of them beginning several years ago, in a still-continuing series of mergers and acquisitions. And the new groupings have often included Scandinavia as well as the European Community nations – Becker's headquarters is in Sweden, and Tikkurila's in Finland. The emergence of Crown as a European force in the wake of its merger by Williams Holdings, its owner, with Berger, is the latest obvious example.

Many smaller companies have long recognised that survival depends upon successful international niche marketing of speciality industrial coatings. Nothing is necessarily going to change in 1992 to improve their revenues and profits enough to pay easily for new levels of environmental compliance.

Moreover, the industry also knows that as soon as everyone still surviving has met the eventual new standards, the goalposts will be moved to advance them further, shaking out even more companies.

One suggested alternative for the smaller companies is to start clubbing together, possibly through joint purchasing of raw materials to increase their bargaining clout with suppliers, and then to use the experience to see if they can take cooperation further. In other words, to consider merger – possibly across frontiers – before acquisition. This might be construed as an opportunity, though the people still faced with job loss in the ensuing rationalisation are unlikely to agree.

Ian Hamilton Fazey

ICI versus Crown: Christopher Parkes reports from the battlefield

No more room on the shelf

THERE was no getting away from the Dulux dog last year. When the hound was not seen at its usual job promoting household paints, it was to be found moonlighting for Heineken, apparently so refreshed by a sip of lager as to be able to paint the parlour and whistle at the same time.

Heineken's pastiche television advertisement flatteringly illustrated the degree to which ICI has succeeded in fixing a firm and popular brand image to e workaday product.

At the same time the commercial probably did its bit to help keep up Dulux sales. Every little helps. But the bulk of the promotional burden was borne by ICI. In an extraordinary blitz last year, the chemicals multinational spent a total of around £6m in the UK on advertising its main household paint products: Dulux Blend and Tone, Dulux paint, and Dulux Woodsheen.

As a result, all three were promoted to Marketing magazine's league of the 500 top-spending brands in the UK. Another of 1987's also-rans, Crown Paints, part of the Williams Holdings group, also made it, thanks to a £2.9m media splurge.

Persistent promotion has helped Dulux retain its position as the leading paint brand in the UK, with a steady 33 per cent share of the market. Dulux has ridden out an extraordinary cycle of change in the industry which has been driven, above all, by a retailing revolution similar to the one which has transformed the grocery trade. The main difference is that while the rise of the supermarket to pre-eminence in food and packaged goods took 30 years, the storming of the do-it-yourself trade by the superstore brigade took only 10.

From about 20,000 in 1979, the number of DIY specialist stores in the UK has shrunk to some 11,000. The large multiples, led by B&Q, Texas, Payless, have come to account for 65 per cent of all sector sales. According to Verdict, the retail market research company, superstore sales have grown more than 10-fold in the 1980s while the old-fashioned specialists have seen only a 25 per cent increase.

With an extra flourish last year, B&Q upped advertising spending by 54 per cent. The paint makers' efforts pale against its £17m budget and the £12m thrown at the market by Texas Homecare. The net effect of all this promotion is that retailers have captured the consumer franchise, and, like Sainsbury's in the grocery business, become brands in their own right.

The market for household paint, like that for beans, soap and fish fingers, is now retailer-led, and is as a result susceptible to all the pressures which have so afflicted grocery producers.

- Price competition has intensified and margins have tightened as major retailers with vast hulk-buying orders have demanded ever more advantageous terms.
- Retailers' own-label products have cut through the ranks of established brands, growing 150 per cent since 1981, to claim almost 40 per cent of the market.
- As in the supermarket trade, most companies' policy dictates that only leading brands will be stocked. It is common, for example, for a grocer to display only the two top brands in any product sector – those which are most prominently advertised – and give the rest of the shelf space to its own-label goods.
- Special circumstances, especially recent rises in titanium dioxide and other raw material prices, have also squeezed margins.

The picture is not entirely black; rising prosperity and increasing home ownership have played their part, but the shopkeepers' efforts have also greatly expanded the DIY market as a whole. Volume sales of household paint have risen by about 7 per cent a year since 1980, while offtake by trade decorators has gone up by only 2.5 per cent.

However, the pressures un manufacturers are such thet the number able to withstand them is shrinking. According to market researchers, MSI, brands other than those owned by ICI, Williams Holdings and the retailers themselves now account for only 4 per cent of the trade.

While there is probably little to be done to restore the smaller manufacturers' market shares, there is every reason to suppose that Dulux and Williams's Crown and Berger names will start to increase their grip on the trade.

Last year's promotional spending indicated a determination, similar to that among leading food and packaged goods makers, to push back own-label products. Just as most supermarket chains have come to recognise that consumers demand choice, and more importantly that no matter how clever their in-house technologists are, manufacturers are better at making things, so the DIY shed operators will probably have to give some ground to the real experts.

As well as splashing their advertising budgets on screen and in print, the leading brand paintmakers have also spent heavily in new product development

From its base position as a lowly commodity, domestic paint is becoming established as something approaching a household fashion accessory, adding value as it develops. Women are becoming increasingly influential in selection, thanks to the retailers' efforts to make DIY shopping a pleasurable leisure activity. Dulux co-operated with Texas recently to set up in-store studios to promote "fashion" ranges. Colours other than white are increasingly acceptable: they also offer higher margins than plain white. And as colour fashions change, so the opportunities increase for exploiting the desire to redecorate more frequently.

Solid emulsions in a roller tray helped grow the overall market. Dulux has also added value with its Blend and Tone concept and DIY painting kits in what are essentially exercises in packaging. Last March, Crown introduced the colour computer to help customers pick the correct shades, and most makers have attempted to segment the market by offering special purpose products, such as anti-condensation paint, for specific tasks.

In the absence of any major technological breakthrough, this is likely to be the pattern of activities in the paint market for some years. Promotion, novel packaging and segmentation will continue, and ICI and Williams can be expected to start improving their market shares as long as they maintain the momentum, and are not deterred by problems such as those generated by the current slowdown in consumer spending.

This is already having a tangible if unquantified effect on all retailers, and there are signs that competition on price among multiple store chains are beginning to squeeze manufacturers' margins further.

But even the downturn has some advantages. Last year's house-buying surge, prompted by taxation changes in the Bndget, is not going to be repeated this year: mortgage rate increases will make sure of that. Consumers are also spending less on holidays and domestic appliances, and what disposable cash and leisure time they have is likely to be spent on painting the parlour...or buying a multi-skilled dog to do it for them.

UK PAINT AND COATINGS MARKET

market sector	volume m litres	avg price £/lt	value £m	market leaders (10+ pc share)
Decorative retail	158	1.57	248	ICI, Crown, Macpherson
Decorative trade	152	1.34	204	ICI, Crown, Akzo, Macpherson
Marine	9	2.66	23	International,Jotun
Offshore	2	2.35	4	Ameron, International, Hempel
Protective	15	2.18	33	Becker, Crown, Croda, Sigma
Automotive	28	1.86	52	ICI, PPG, BASF, Herberts
Vehicle refinish	27	3.34	90	Herberts, ICI, BASF
Comml vehicles	9	2.83	25	Joseph Mason,ICI, Croda,Herberts, PPG
Aviation	4	2.04	0	ICI, PPG, Herberts
General industrial	39	1.95	78	Trimite,International,Macpherson, ICI
Cans	20	1.38	28	ICI, BASF,International
Powder	15	1.78	28	Evode, Macpherson,International
Coil coatings	11	1.95	21	Crown,ICI,Herberts, Becker,Macpherson
Agricultural	12	1.35	16	Macpherson,International, Croda
Wood	20	1.33	27	Macpherson,Granyte, Sonneborn & Rieck, Manders
Electropheretic	3	3.10	10	PPG, ICI
Drum	3	1.32	4	ICI,International

Source: Jordan Information Systems Paint Industry Review 1989

UK Retail paint

market shares	1987
Dulux (ICI)	33%
Crown (Williams)	19%
Berger(Williams)	7%
Cover Plus (Woolworth's own label)	7%
Other own label	30%
Other brands	4%

Source: MSI

The market for household paint, like that for beans, soap and fish fingers, is now retailer-led, and is, as a result, susceptible to all the pressures which have so afflicted grocery producers.

PROFILE: INTERNATIONAL PAINT

Niche work, No.7

INTERNATIONAL Paint, the trading name by which the world knows Courtaulds Coatings, has long been underestimated by the other paint giants.

ICI puts International's sales at 200m litres of paint a year and ranks it ninth in the world league table. BASF is slightly less generous, ascribing 10m litres less of volume and tenth place. Both are wrong: International is bigger and has been doing better.

Neither of these two undisputed leaders underestimates International's technological and marketing abilities in its core business of marine paints for ships – where the company is the world leader – but almost certainly they and others have not yet fully recognised what has been going on at International recently.

One reason is that International has not been very forthcoming in the past about its sales volumes and what and where they are, nor about progress in some long-term research. This is understandable, because such information shows how the business is changing, alerting competitors. It is possibly because International's strategy is now firmly established – and research paying off – that the company is less reticent about talking numbers. It means it sees itself as unlikely to be deflected by competition

Mr Michael Pragnell, managing director of Courtanlds Coatings, says that output is now running at more than 235m litres a year. This puts International at seventh place in the world league table, behind Nippon, the leading Japanese paintmaker, hut ahead of the latter's compatriot Kansai.

It means that International must be growing significantly in its new core business of powder coatings, continuing to do well in marine paints and re-emerging as a significant force in can and other industrial coatings. It must also be expanding through Porter Paints, the decorative manufacturing and marketing company it bought in the US for \$140m in 1987.

Indeed Mr Pragnell is happy enough with progress to sum up the changes accomplished in the last decade like this: "In 1987-88, sales were £885m, profit was £28m, and capital employed was £134m. We are doing better all round in the current year. Sales may well exceed £450m, with \$250m-plus of them in the US.

"At the start of the decade between 60 and 80 per cent of our profit came from the yacbt and marine sectors. Less than 80 per cent does so now, even though in marine paints we now have 40 per cent of the world market and are twice as big as our nearest competitor.

"In 1980, too, 60 per cent of International Paint was in Europe. That is down to 35-40 per cent now. North America accounts for 30-35 per cent, with the rest of the business in Brazil, Australia and the Far East."

What this means is that International has broadened its worldwide geographical base while giving itself rather more legs to stand on than the single pillar of marine paints on which it has built its reputation for both advanced technology and global marketing.

Transfer of marketing skills from marine to powder was crucial

It has done so despite the worldwide decline in its core marine market. International has not only kept its marine paint sales up, but increasing despite these trends, taking an increasingly larger world market share as other paint companies dropped out of the sector.

Good technology, marketing technique and computerised systems have been key features. Owners can arrange to berth vessels at a wide range of convenient ports, where the exact quantities of International's paint is always ready for any particular ship.

International has also been successful in working with Nippon Paint in Japan.This has built a good relationship with Japanese shipowners, who are sending ships to International's new facilities in Singapore now that the strong yen has made it much more expensive to paint them at home.

Operating worldwide in marine markets is helping International to emerge now in powder coatings.

Mr Pragnell says: "Transfer of marketing technology, standards and operations from marine to powder bas been crucial. Powder is a technology, not a business.

"We started in 1976 in Germany and the UK by acquisition. We have invested £40m in the last eight years in acquisitions and green field ventures. In the early 80s we bought in France and Brazil; in the mid-80s we bought in Korea, the US and Australia; in the late 80s we bought in Spain and Italy.

"We are growing at an annual rate of 40 per cent plus in real terms now, compared with a rate in the high 20s in the years before. There has been a price: the business did not start producing profits until 1986."

International has also been paying strong attention to Asia-Pacific markets. Apart from its special relationship with Nippon, it is directly in Korea, Singapore, Hong Kong, Malaysia and has just started up in Taiwan and Thailand.

In Australia it is huying out the minority shareholders of Taubmans Industries – the Courtaulds group previously had 56 per cent – to give it greater freedom to for faster action against ICI Dulux, its rival.

It has also bought Epiglass in New Zealand to take control of 80 per cent of the Australasian yacht and marine paints market. On top of that, it is using Australia, where it claims to lead, to pursue coil and can coating markets and sharpen a technological edge it hopes to transfer to Europe, where it is making headway anyway.

Mr Pragnell says that the company is determined to beat ICI in the race to dominate the world with waterborne coating for steel cans. ICI, through its US company Glidden, leads on aluminium cans. "We started our programme in 1979 and shipped our first commercial orders in 1986. The system has been proved by American National Can and we expect to do well," he says.

He adds: "Our value added per employee, our return on sales, return on capital and cash flow are all improving. We are achieving a 10 per cent return on sales for established businesses. We spend about 2.5 per cent of turnover on R & D and it is paying off."

Ian Hamilton Fazey

Ian Hamilton Fazey on the consequences of today's global motor vehicle industry

Makers must follow the marques

MR AUSTIN O'Malley of Pittsburgh Plate Glass (PPG), the joint second largest paint company in the world, sums up what is happening to the car industry and the effect this is having on the world's leading paintmakers.

"Ownership of the automotive industry has gone global. Supplies and suppliers must go global too. We are going for global sales to key customers. Naturally we are concentrating very hard on the customer," he says.

"We supply material with high value added to help motor manufacturers cope with their cost and production problems. We see ourselves helping them find low-cost procedures to paint cars in such a way that we ourselves can remain fiercely competitive."

There are two markets for painting cars. One is in the factories where they are made and is called, arcanely, OEM – it stands for original equipment manufacture – while the other market goes by the initials VR, for vehicle refinishing, the repair of damaged paintwork.

OEM comprises about 6 per cent of the total world market for paint of 12,000m litres. This works out at 720m litres at a average selling price of £1.86 per litre. This in turn comes to about £1.34bn.

The implications of a globalised motor industry wanting global suppliers is that the bulk of this considerable pot of money is available to only a small number of paint companies capable of operating globally themselves in both marketing and technology. The trend has been established already on a continental scale in the US, where the car industry has reduced itself to only three main suppliers – PPG, BASF and DuPont. The arrival of the single European market in 1992 is expected to have a similar effect.

On a worldwide scale, the principal companies in this exclusive club can be counted on two hands: PPG, BASF, Nippon, Kansai, DuPont, Hoechst, ICI and Akzo. Of these, only PPG and BASF are true world players in OEM. The others are confined mainly to their home markets, though often with successful operations in single, scattered places, such as ICI's in Canada, Malaysia and Australia, all of which help the company claim 6 per cent of the world market. However, there is also a crucial technological overlay to the market structure which affects it greatly.

A key stage in painting cars is the application of the first coat. Electrolytic techniques have been found to be best here, ensuring an even spread of coating that will have a crucial effect later on appearance and protection after other coats have been sprayed on. One strand of the initial technology for this was developed first by ICI, but the real development to make it work took place in the US at PPG, which grew into a chemicals giant after starting out as a glass supplier – to the motor industry in particular.

Hoechst also developed a workable system. Paint is a mixture of pigment, resin, and solvent. The key was to develop resins that would carry an electrical charge. Then, a charged-up car body, dipped in a tank of this special paint, would attract oppositely-charged resin molecules, which would in turn deposit the paint on the car body by electrolysis.

Both PPG and Hoechst exported their technology by licensing. For example, Hoechst linked to DuPont, which in turn linked to Kansai. PPG linked to Nippon in Japan and to International Paint in the UK. But when International decided in 1985 to concentrate on marine markets, Mr O'Malley, who ran the OEM business, negotiated its sale to PPG.

With Mr O'Malley at the helm in Europe, and responsible for many aspects of international marketing, PPG has become an increasingly global operator, building on an existing base of relatively small acquisitions in France, Spain, Italy and West Germany.

PPG also had another major technological advance to help it: 12 years ago it developed a resin which would carry a positive charge, thus enabling a car body to dipped into an electrocoating tank charged up as a cathode. The importance was that the method produced a more stable and rust-resistant coating than the previously dominant "anodic" technique.

Critically for sales, it met the Canadian code on corrosion – which is especially tough because of the use of so much salt on the Canadian roads during the winter. Mr O'Malley says: "Within two years it was well on the way to becoming the world standard: 83 per cent of the cathodic tanks in the world are now PPG technology, either supplied by us or by licensees."

To keep its lead, PPG is constantly developing its technology. Other leading paintmakers are, however, working to

Only PPG and BASF are true world players

develop their own cathodic electrocoating systems. BASF claims that its is just as good. It claims of paint 18 per cent of world OEM market share against what it says is PPG's 19 per cent.

PPG's great strength, however, is a 45 per cent share of its home US market. This gives it an inside track with the principal US car manufacturers, while its global spread also gives it an edge in other geographical markets.

In a key account business, it has formed a worldwide team for each major manufacturer so that the same people service the same customer, wherever a car plant is located. Moreover, something more than technical service is on offer – increasingly it is selling a complete paintshop staffed with PPG employees.

The value was never more proved than in Korea, where General Motors and Daewoo chose PPG. The specification for the plant's coating system was designed by Opel in West Germany, pre-treatment chemicals came from the US, sealants from Spain, electrocoat and topcoats from France. "We have been creating our own 1992 from 1965 onwards, but on a wider basis than Europe," Mr O'Malley says.

In Europe the race is on to be third when the car industry narrows down its suppliers on US lines. Herberts and Akzo are fighting hard, but so are ICI and DuPont, which have formed a joint venture called IDAC especially for the purpose.

Mr Herman Scopes, head of ICI Paints, says that customer response has been good, with several trials on the way. He believes that one way in is to develop new products that will leapfrog those of competitors. A lot of hope is being pinned on waterbased paints. These use water as their solvent so that there is no atmospheric pollution as they dry. Organic solvents emitted from the drying ovens of car plants eventually degrade in sunlight to form some of the ingredients of acid rain.

BASF and PPG say they can counter with their own water-based paints and are sceptical of IDAC achieving its target of 20 per cent of the European market in the early 1990s. However, VR, the second automotive market, is more wide open and lucrative, giving competitors good returns to fund the fight in OEM markets.

With a total world market of about 480m litres and an average selling price for the paints involved of £3.34 per litre, the market is worth a staggering £1.6bn. Here, the collapse of the UK motor industry and import penetration of foreign cars has helped ICI dramatically.

With so many different types on the road – painted in different countries with different paints – the company has developed advanced skills in matching colours and coatings systems which it believe will give a competitive edge.

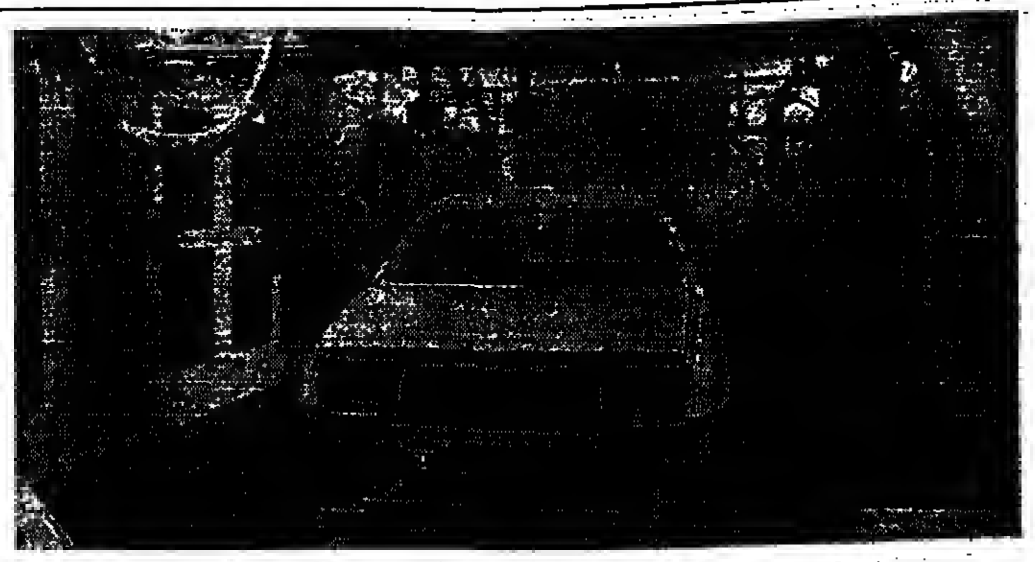
Herberts, the Hoechst subsidiary, is another major player here, but so is BASF. Meanwhile PPG believes that the stronger it gets in OEM markets, the more clout it will wield long term in VR – who better to repair a coating than the people who applied it?

Much will depend on the way vehicle repair is marketed. The traditional "under the arches" business will probably always survive, but the trend is to sophisticated paintshops staffed by knowledgeable technicians. The major companies now train them well, flying them thousands of miles for one- or two-week courses.

At ICI, Mr Richard Stilwell offers complete computerised management systems to VR paintshop owners, competing directly with a similar offerings from Akzo.

"We are looking well beyond just selling product," Mr Stilwell says. "There are things that our customers do not yet know they need."

When a shift of only one-tenth of 1 per cent in world market share is worth £1.6m of sales, the paintmakers are likely to find many such things as they battle to be chosen.



A car bodyshell under the paint spray: good rust resistance is critical for sales

PROFILE: DUPONT

A heavy commitment

THE massive structure of the DuPont empire makes it difficult to specifically assess one segment of the company's operations such as paint and coatings.

The company's primary involvement in the field comes through a heavy commitment to the automotive finishes, refinishes and maintenance prodnct fields. Under company structure, paints and coatings are reported as part of DuPont's mammoth industrial and consumer prodncts sectors.

This sector of DuPont recorded sales of \$2.839bn in 1986 and \$3.284bn in 1987. After-tax operating profit was reported at \$182m in 1987, up from 1986's \$169m mark.

Recent growth has included the opening of new facilities for the automotive industry, including a laboratory in Troy, Mich., designed to demonstrate new finishes technology, an advanced composites demonstration line to produce large automotive structural parts, and a plant in the Kansas City, Mo. area to assemble and paint front and rear bumper covers for a neighbouring General Motors assembly facility.

DuPont's Automotive Products Group is recognized as the single largest market segment. Automotive paint sales, valued at more than \$1bn annually, represents more than 40 per cent of the company's worldwida sales. Recent estimates note that the company's Ford operation with its more than 500 employees operates as a subsidiary under the name Mt Clemens Coatings Inc. This unit is said to produce more than 10m gallons of acrylic enamels, primers and electrocote finishes annually and account for more than half of the paint used for automobiles produced at Ford's assembly plants in the US and Canada.

The new Kansas City plant is supplying painted front and rear fascias for General Motors, further adding to DuPont's strength in the automotive finishes field.

Overall, DuPont is recognized as one of the industry's foremost producers of acrylic lacquers and enamels for the automotive original equipment manufacturers as well as the refinishing markat. New primer technology is setting the course for DuPont to take a major role in the automotive primer market also.

DuPont's total paint and finishes sales were estimated at \$650m in 1986 and slightly higher in subseqnent years. DuPont is providing contracting painting services to industrial customers through its maintenance painting service programme.

DuPont's Finishes and Fabricatad products department lists several paint plants, including Tucker, Georgia, where products are produced for original equipment manufacturers as well as refinish enamels.

The Tucker facility is also reported to produce auto original equipment manufacturing and refinish lacquers and undercoats.

DuPont's Flint, Mich. facility has been responsible for auto enamels and undercoats. In Moberly, Mo. auto original equipment manufacturing and refinish enamels are produced. The Moberly facility also produces antomotive original equipment manufacturing and refinish lacquers and industrial polyurethane enamels.

in Toledo, Ohio, DuPont prodnces antomobile original equipment manufacturing and industrial enamels.

Larry Dill

PROFILE: SHERWIN-WILLIAMS

A domestic force

THE SHERWIN-Williams Company, headquartered in Cleveland, Ohio, is ranked as one of the largest paint and coatings manufacturers in the world, with manufacturing and distribution sites in 48 states and several overseas countries.

in addition to its primary Sherwin-Williams brand paint and coatings, the company also produces and markets products under the Dutch Boy, Martin-Senour, and Kem-Tone banners, as well as private label brands for sales through independent dealers, mass merchandisers and home improvement centres.

Coatings are also produced for original equipment manufacturers in scores of industries. Sherwin-Williams also is a leading producer of special-purpose coatings for the automotive aftermarket, industrial maintenance and traffic paint markets.

The company celebrated its 122nd year of business in 1988 with an increase in operating profit of 7.7 per cent to \$101m. Net company sales increased by 8.3 per cent to \$1,950m, up from 1987's net sales of \$1,801m.

Sherwin-Williams' nearly 2,000 company-operated paint and wall covering stores across the US accounted for an 8.0 per cent sales increase over the last year as the keystone to the company's Paint Stores segment. The segment's overall operating profit dropped slightly during the year, however, due to provisions that were established in the fourth quarter for the closing of certain unprofitable stores and reduced margins caused by the required increase in reserves due to the escalating costs of products sold.

Sherwin-Williams' coatings sales increased by 8.2 per cent while operating profit climbed by 4.1 per cent during 1988. The gain in operating profit in this segment was credited to the sale the company's Canadian joint venture, BAPCO. According to company statements, a major portion of the gain was offset by provisions for the disposition and termination of certain company operations.

Increased raw materials costs and shortages, particularly of titanium dioxide, an essential ingredient in paint and coatings, would have

"We are positioned to improve 1989 results"

resulted in a decline in operating profit for the coatings segment in 1988, were it not for the slight gains made from terminating Sherwin-Williams' less desirable operations.

Overall, net company sales increased 8.4 per cent to \$444.6m during the most recent quarter.

Mr John Breen, chairman and chief executive officer, has voiced concern over the decline in operating profit during 1988 due primarily to conditions in the raw materials market. However, Mr Breen anticipates that the rate of materials cost increases will be slower in 1989, and result in continued increases in the company's domestic market share.

"We are planning to increase prices in 1989 in an attempt to cover these costs and improve our operating margins," Mr Breen explains. While the economic outlook for 1989 is uncertain, we believe we are positioned to improve our results in 1989."

On the global front, Sherwin-Williams' international group is divided into four sectors: Sherwin-Williams Canada, Sherwin-Williams Mexico, Sherwin-Williams West Indies and Sherwin-Williams Brasil.

The company also has extended licensing rights to affiliates in 25 other countries around the world. Licensees produce and distribute architectural coatings, industrial and automotive paint finishes, paint sundries and a variety of home decorative products. The International Group's primary markets include independent paint dealers, painting contractors, automotive body shops, commercial and industrial maintenance accounts, original equipment manufacturers and do-it-yourselfers.

International sales are directed through Sherwin-Williams' direct sales force, distributors and jobbers. The company also operates 78 of its own stores in Mexico, 15 in Jamaica, eight in Trinidad, 12 Puerto Rico and six in Panama.

Although Sherwin-Williams is one of the most powerful industry forces on the domestic front, it faces many tough competitors in the international market, where the company only rates its competitive position as significant in Mexico and the West Indies. Like its domestic operations, Sherwin-Williams bases its international competitive stance on price, service and a sensitivity toward quality products.

Larry Dill

PROFILE: BASF

Getting ahead on the spiral

THERE IS a vicious spiral at work on the coatings industry today. It is called the environment-technology spiral. It starts with new environmental standards that the industry has to meet on things like effluent disposal and solvent emissions from the paint shops in car factories.

As soon as they are met by one manufacturer, this is taken as the state of the art and competitors have no choice but to move towards it. But no sooner has everyone caught up, than new, more challenging targets are set. Most paintmakers acknowledge the pressure and put the best face they can on bowing to it.

At BASF's coatings headquarters in Munster, however, the way the company is coping with the environment-technology spiral is now being viewed as a positive marketing attribute. Dr Jurgen Kammer, the chairman, believes it will give BASF a vital edge in the battle for world markets in many lucrative industrial paint sectors.

He says: "One of the biggest impacts will come from the environmental side. In West Germany we have the highest standards already. What today is a burden will tomorrow be an advantage." Because of the sophisticated chemistry and engineering involved, getting ahead en the environment-technology spiral can only come from a commitment to progress that is inherent in the corporate structure anyway – simply because such things cannot be learnt overnight or bought in.

BASF's profile in the industry has been strong on reliable products, on high technology, and quality. Compared with ICI, the company has been less noted for its marketing and PR skills, an area of weakness in German companies generally. For example, BASF admits that many believe it only makes tapes for hi-fis and video recorders.

There is an historically-based focus on production. Dr Kammer says that it stems partly from everyone in Germany having a deep cultural understanding of how to manage scarce resources and the logistical disciplines this imposes. While some US marketeers might scoff at this, BASF has been beating many of its competitors by turning its culture-generated strengths to market advantage.

This has been possible because most of its customers are not consumers, but producers of sophisticated products like cars and electrical goods. They want quality from coatings that work and which will not get them into trouble with increasingly tougher laws on pollution as they apply them in their factories.

They also want technical service. Dr Kammer says: "What we have is a long term view in technology, research and development, and investment. We believe these factors will combine to create market share. You cannot just make it on price. Customers want quality, partnership and added value from what they buy from us."

Customers want coatings that work and which will not get them into trouble with increasingly tougher laws on pollution as they apply them in their factories.

In terms of size, BASF is joint second with PPG in the world paintmakers leagua. It shot up from fourth or fifth place in 1985 when it bought Inmont, the US paint and inks giant, from United Technologies for $1bn, beating off challenges from ICI and Akzo.

Inmont brought production volume, market share, some old factories which Dr Kammer admits were "not state of the art," and a different corporate culture that was more oriented towards a North American "can do, profits now" style of management demanded by shareholders wanting ever-better yearly results.

Like many German companies, BASF's backers are institutional, they take a longer view of the marketplace, and do not burden management with the need to show continuous short-term progress.

Mr Geoffrey Watson, who came with the acquisition and is the next President of the British Paintmakers Association, says: "The main difference was cultural. They were acquiring a divested business which was looking for a white knight. We soon found chemical ways to combine. Dr Kammer adds: "Many things were congruent. The overall thinking of the managements was very similar. Differences were functional and operational. A flow of technology and understanding overcame differences. Cross-fertilisation of research findings has been very beneficial."

It was Mr Watson's influence which persuaded Dr Kammer to be interviewed by the FT. The company had previously been nneencarned about expressing itself to a wider audience than its customers – and even then it let its products and service speak for themselves. In a world war for market share where ICI's promotional and marketing skills are among its greatest assets, however, that attitude is likely to change for ever.

The environmental issue will be a key one here, for skilful publicity should enable BASF to put a great deal of pressure on lagging competitors, especially since the scale of what is involved will require deep pockets. Dr Kammer says: "To achieve the new standards the industry has to reconstruct it factories, optimise its production processes and actively change or modify technologies and application methods. All this calls for investment in manufacturing, research and development and in marketing at the same time.

"The industry has to spend nen-working capital on site reconstruction while at the same time having to manage technological change which means introducing totally new products and application methods whilst still supporting the ongoing business of conventional old technologies. "It is easy to predict that only big companies will survive in this capital and technology race, which already is on its way."

BASF has already spent DM200m over four years on its Munster factory, the largest concentration of paintmaking facilities in the world, occupying nearly 100 acres and employing more than 2,800 people. One major advance has been to design a flexible manufacturing system for paintmaking itself, a batch process which has previously defied such advances.

BASF's engineers realised that the bottleneck was in the blenders where all the ingredients in a fermulatien are mixed. Conventionally, these either hava te cleaned eut before the next batch is mixed, er an efficiancy-inhibiting strict progression from lighter to darker colours must be followed. BASF's revolntionary solution has been to have movable blenders which can be slotted into line as required.

It sounds simple but the handling problems were immense, since each blender weighs several tonnes. The answer was to convey them around on electrically powered hovercraft and purpose-built motorised hoists.

Labour savings have been considerable. The principles are being copied in a new factory in Spain and will be introduced as new plant is built on existing sites. Indeed, BASF's investment will total at least DM1bn before the end of 1993. By the time the single European market becomes operational it will have re-equipped factories at key sites in all major national markets and will be pushing its environmental edge hard.

It is only 24 years since BASF started building up Glasurit – still the company's main brand name in Germany and France – but growth has been continuous since. The big leap forward to becoming a world player – rather than just a European one – came with the Inmont acquisition. Now the company has a good spread in North, Central and South America, and in India. It has a joint venture in Japan with Tanabe and is close to Dainippon Toryo, which is in the same corporate group as Mitsubishi Motors.

Dr Kammer says that South East Asian markets – an Inmont factory was inherited in Malaysia – are being looked at closely. He adds: "The immediate advantages of buying Inmont have included productien cost economies and currency exchange in our favour.

Bnt mere importantly, Inmont was a strategic move of the first priority. It was well worth $1bn. We are not talking about sales or results. There are only a few global suppliers. The decisive question is are yon one of them or not?" Undoubtedly, BASF is.

Ian Hamilton Fazey

Nick Garnett looks at Europe's coil coatings industry

Another year of buoyant growth

ANOTHER remarkably good year was notched up in 1988 by the coil coating industry. After growth in 1987 of a little over 10 per cent across Europe, the industry enjoyed a further buoyant twelve months.

A number of issues are bubbling close to the surface, however, about the way the industry can develop.

Firstly, the technological cost of developing new paint and film coatings is rising steeply and that looks as if it will reinforce the general trend towards concentrating power among the big paint suppliers and away from the smaller companies.

The bigger companies are increasingly stressing their ability to offer a package of products and technical assistance for applications.

Secondly, the industry is conscious that its phenomenal growth might not continue indefinitely and that it needs to make further inroads into customer areas where it is weak, and perhaps find some new applications.

The first coil coating(for venetian blinds) was carried out more than 50 years ago but many potential production areas – like the car industry – still use pre-coating only to a very limited extent.

Finally, there are expected to be more significant advances in the way coatings are applied. "The future will lie in attempting to speed up and make coil coating processes more efficient," says Mr Peter Burling, general manager, sales and marketing, for organic coatings at British Steel. "This will partly involve developing newer paint systems and processes."

The coil coating industry is made up of two principal elements – the suppliers of paint and film(for organic coating as against metallic coating) and the coil coaters themselves.

The main paint and film makers include Becker, the Swedish group which claims the number one position in Europe, Imperial Chemical Industries, BASF and Hoechst, Sigma of Belgium, Crown in the UK and Italian companies like Boercolori and Salchi. In North America, they include PPG, Whittaker, DeSoto and ICI-owned Glidden.

There has been considerable consolidation in the world's paints industry in the past few years. Coil coating materials have not been a driving force in this but have been caught up in the backwash.

The main coil coaters in Europe are Hoesch, Sollac of France, British Steel, Phoenix (part of the Cockerill group in Belgium), SSAB in Sweden and La Magona of Italy. The US industry is structured somewhat differently in that coil coating is normally carried out by specialist coil coaters rather than divisions of the main steel makers.

In 1987, the last year for complete statistics, 341m sq metres of coated steel were produced in Europe and 182m sq metres of coated aluminium. According to the European Coil Coaters Association, this was an increase of 9.5 per cent over 1986, but it compared the output of just 41 coil coaters in 1987 with 43 in 1986. A proper comparison, says the ECCA, would give an increase of more than 10 per cent.

The biggest application by far is the building and construction industry. In Europe, this absorbs more than a half of coated coil. The other main applications are the car and transport industries, and domestic appliance production. Only about 6 per cent of organic coil coating is with film – mainly PVC-based and used for highly decorative finishes such as casings on microwaves. The rest is paint.

The basic technology of coil coating has not altered very much. Steel or aluminium coils are unrolled on automatic painting lines and then coated. Roller coating accounts for 90 per cent of this work, the remainder by spraying. The coatings are then cured to their required hardness and flexibility and the coils are then rolled up for shipment to manufacturers. Makers of caravans, washing machines, profiled building cladding and all the other product areas that take coil coatings can bend or stamp the metal into required shapes without damaging the coating surface.

Use of electro-beams rather than ovens for heating and curing which has been making a tentative appearance is now gathering pace, the technique based on producing a chemical reaction for cross-linking the particles. The use of infra red and lasers is also coming in.

What is changing more swiftly perhaps is the economics of paint coatings in a trend working to the benefit of those companies involved in pre-painting metal.

Coating plant is becoming more sophisticated and more expensive. British Steel, which sells in excess of 300,000 tonnes a year of coated coil says coil coating lines can cost between £15m and £23m. This trend is being reinforced by environmental considerations which are adding to equipment costs. At the same time, steel-using companies are thinking much more about cutting overheads, saving factory space and simplifying production operations. This should continue to benefit the coil coating industry.

The industry believes coil coating still has some way to make up, even with existing customer industries. "I see growth continuing in areas that have not been fully exploited," says Mr Burling.

The Italians have been very active in spreading the coil coating message into architectural schools and building colleges and this is now being pursued in northern Europe. About 50 per cent of the steel coil used in the domestic appliance industry is pre-coated but the coating industry thinks there is still further ground to penetrate in that industry.

The old question still remains about the car industry, still a relatively small user of pre-coated coil, given its overall size. How much coil itself will make progress in car body construction will partly govern whether the coating industry's growth will continue at the heady levels it has enjoyed in the 1980's.

Precoat sales up 15%

ALTHOUGH THE overall consumption of paint by domestic appliance manufacturers is more or less static, there is a rapid shift within that market to what is known as precoating or coil coating.

The traditional way of making white goods such as refrigerators, washing machines, dishwashers and kitchen stoves is to build the steel cabinets first and paint them afterwards. With precoating, that procedure is reversed: the appliances are made from coils of sheet metal (usually galvanised steel) which have been coated with paint in advance.

Industry estimates suggest that purchases of precoated metal by European domestic appliance manufacturers are increasing by 15 per cent per year. This sector of the market accounted for about 4m litres of paint in 1988. Akzo is the leading supplier, followed by International Paint.

Among the appliance manufacturers, Hotpoint of the UK has been a pioneer of the technique and is probably still the leading European user of precoat, with AEG of West Germany in second place.

One reason why precoating is growing in popularity is that it enables manufacturers to eliminate their in-house painting and finishing process. This cuts costs, frees space for other uses and removes the environmental problems associated with paint shops.

Precoating manufacturers also claim that the technique gives a better finish which is more hard-wearing and more resistant to staining and chemical attack than traditional post-manufacturing paints. The coating on the metal coils is cured at a very high temperature – above 200 deg C – which a completed appliance cabinet could not stand; this gives a very tough finish.

Although it might be thought that a precoated surface would be scratched or damaged during the manufacturing, it is generally strong enough to resist this. As a precaution, however, manufacturers sometimes protect particularly sensitive areas, such as the front panels on refrigerators, with a thin film of plastic that can be peeled off at the end of the manufacturing process.

Clive Cookson

AUSTRALIAN MARKET

Microcosm of things to come

A TELEVISION advertising war has just broken out in Australia. ICI's Dulux — the company is named after the main brand of paint — is spending A$5m this year, which is more than the country's whole paint industry has usually spent in total.

Taubmans Industries, Dulux's great rival and owned largely by International Paint, is going A$1m better with its promotions budget, most of it on television too.

One reason for the push is that Dulux is spending A$100m over the next five years to upgrade its seven factories. Mr Doug Curlewis, a marketing expert and Dulux's managing director, says that ICI Australia is looking to paint for significant growth.

With a population of only 16.5m, Australia's is a small market, irrespective of the country's 3m sq miles of vastness. So is all this activity really a storm in a paintpot?

Mr Colin Ravenhall, Taubmans managing director, explains why it is not: "Trends show up quickly here because of the small population," he says.

"For example, the first two-piece cans outside the US were in Sydney, then Melbourne. The industry switched from three piece cans almost overnight and we, as the leading can coaters then, were caught with our pants down. It taught the paint industry a lesson all over the world."

The lesson was that the industry has to work hand in glove with its industrial customers and develop new technology both with them and for them, even if it means leading the way to better, more profitable production techniques before the customers have thought of them themselves.

The fight for dominance of Australian markets in both decorative and industrial paint now promises to teach the world something else, for Australia is a microcosm of things to come.

There are 116 paint companies in Australia but a mere three of them now control nearly 80 per cent of the total market. Moreover, the big two in particular have growing, individual, overwhelming control of some segments.

The rationalisation of most other countries' paint industries has a long way to go in comparative terms. Australia will show the effects of monopoly and duopoly on prices and choice more rapidly than anywhere else, so the world is watching.

What has propelled Dulux and Taubmans into big promotional spending, however, has been sudden turmoil caused by the disappearance of one major competitor.

The change was brought about when the West German chemicals giant Hoechst decided in 1987 to get out of decorative paint and concentrate on industrial markets. The struggling Berger group — a declining third in its UK home territory behind ICI and Crown — was the principal arm of Hoechst's decorative paint interests. Its industrial coatings went into Herberts — Hoechst's industrial coatings company — while its decorative business was sold to Williams Holdings of the UK, for merger with the newly-acquired Crown Paints.

Williams then proceeded to dispose of Berger's interests around the world — there was quite enough to do sorting out the new Crown-Berger combination at home without having to cope with problems in far-flung corners of the former British Empire.

The Australian problems were particularly acute, for Berger's two main decorative brands — Berger and British — seemed much more locked in battle against each other than against Taubmans, Dulux or Wattyl, the remaining large player.

Indeed, Berger was losing about A$1m a year.

A complex series of negotiations and discussions began, with ICI seeking to buy the whole Berger business but talking to Taubmans about selling on one of the brands. The idea was that Dulux would have Berger brand and Taubmans the British label. But the talks broke down.

Taubmans took nothing and Mr Curlewis was left with three brands on his hands and an ailing paint company to blend with Dulux's own business — and at a time when Dulux was only just coming back to a decent quality of business life after many years of poor profits.

"The ICI acquisition of Berger has been very good for us," Mr Ravenhall says. Taubmans is moving quickly and hard to try and catch Dulux off-balance.

Dulux is only too aware of the danger. As Mr Greg Beatty, Dulux's head of customer services puts it: "We shall have an awesome strength eventually but first we have to get through this transition. We can't be arrogant just because we are the biggest. We have to earn the right to be trusted as No.1."

Dulux's share of the total market is near 40 per cent, while Taubmans has about 22 per cent and Wattyl about 17 per cent. Wattyl, an Australian independent, is profitable and strong among specialist outlets.

Mr Ravenhall says: "It is becoming increasingly a two-horse race because Wattyl is fighting a different battle, going for high margins rather than high volume.

Taubmans hopes to score because Dulux's will have to juggle too many balls at once. Mr Curlewis, recruited by ICI in 1984 to pull Dulux round, learned his brand management skills from 15 years of senior management with Philip Morris, the tobacco giant, many of them in New York. But even he may be tested in trying to run three brands against each other and the competition.

Retailing floor and shelf space could play a big role here. Big stores would have to stock five brands if they take all three from Dulux, one from Taubmans and run them against their own label.

Dulux is scoring among specialist paint shops, whose owner-managers see great convenience in getting three brands from one company and only getting one invoice each month.

The big retailers, however, have an understandable argument to advance when deciding which brand or brands to drop and save floorspace — they want to preserve competition between suppliers and keep them on their toes.

Even as Mr Ravenhall was explaining his strategy, the buyers from one large retail chain were in a nearby office negotiating to replace Dulux's British brand with Taubmans.

Mr Curlewis knows the argument well. He uses it himself to explain why Dulux has stayed in heavy duty protective coatings in Australia when ICI has long since abandoned the sector as a core business.

Taubmans leads in this sector, thanks to the pre-eminence enjoyed by International Paint, its parent, in world markets for marine and protective coatings. While Dulux stays there in Australia, Taubmans must keep its prices down.

In industrial markets, Dulux dominates in vehicle refinish paints — used for car repairs — but its claims of clear leadership in car factory paints shops are disputed by Taubmans, which says the market is split evenly.

Taubmans dominates in marine and yacht paints — because of International — but the fight is less one-sided in other sectors.

When things settle down, no one expects Dulux to be anything other than overall market leader, however: it is too far in the lead and too well managed to fall far — if it falls at all — no matter what Taubmans does.

For his part, Mr Curlewis has embarked on a vigorous quality programme for products and services to prove that the giant company is worthy of the power it wields.

The customers will make the final judgment.

Ian Hamilton Fazey

PROFILE:HOECHST

Niche strategy emerges

BECAUSE HOECHST, the West German chemicals giant, last year dropped out of the league table of the world's largest ten paintmakers, it would be wrong to interpret this as a sign of weakness.

The reverse is more likely to be the case: Hoechst dropped out because it cut off e branch of its paints and coatings business that was holding it back. It was a pruning process. The remaining plant may be smaller, but is expected to develop much more strongly as a result.

The branch was the company's entire world share of the decorative paints market, which was run by Berger, Jenson and Nicholson, its British-based subsidiary. Now Hoechst is concentrating its resources into Herberts, its industrial coatings hnsiness. Berger's industrial products have been transferred to a British subsidiary of Herberts.

Herberts will concentrate on car paints

A tightly focused niche marketing strategy, centred on Herberts' European home market, is now emerging. Berger had been in trouble for several years. It had some successful products, such as the Cuprinol range of wood preservatives, and many good ones. However, it was always a matter of amazement to many in the industry that the company had taken a technical lead several times in decorative paint technology but always managed to lose it in the end to ICI and Crown, its main British rivals.

Third place and squeezed is the worst position to he against such skilful marketers, especially with the trend to selling paint throngh do-it-yourself enperstores, which usually want to stock only the two leading brands — Dulux and Crown — and the store chain's own-label paints. Berger had to go into own-brand manufacture for others to add enough volume to its own brands to try to stay afloat.

In a competitive market depressed by poor prices, this proved one factor on the road to divestment by Hoechst. Poor performances by overseas subsidiaries, particularly in Australia whsre losses were mounting, did not help.

Berger has now heen absorbed by Crown in the UK and its Bristol factory has been closed. The rest has been sold off in bits to an assortment of buyers in foreign markets. So where does that leave the remainder of Hoechst'e coatings husiness, namely Herberts?

A look at the way Herberts has been developing provides some clues. The company was originally a private one specialising in antomotive paints and industrial coatings. It had built e good reputation among West German car manufacturers in the post-War years. Hoechst, a principal supplier, took a 25 per cent share in 1972. Four years later it bought the rest.

In 1978, Hoechst decided to use Herberts as the focus to unite its European paint interests into oue gronp. The decade was taken up first with pulling everything together and establishing economies of scale through central purchasing, data processing and marketing strategy, then with selling anything not considered a core business.

Thus the West German wood varnish business went in 1982, followed by German decorative paint interests in 1984 and plastic furniture surfaces in 1985. The disposal of Berger 10 years later completed the process.

The company says: "These measures tied up substantial personnel capacity and some were taken in ecouomically lean years. They are now proving to be correct, since they have equipped Herberts to share in worldwide expansion of its chief paint groups."

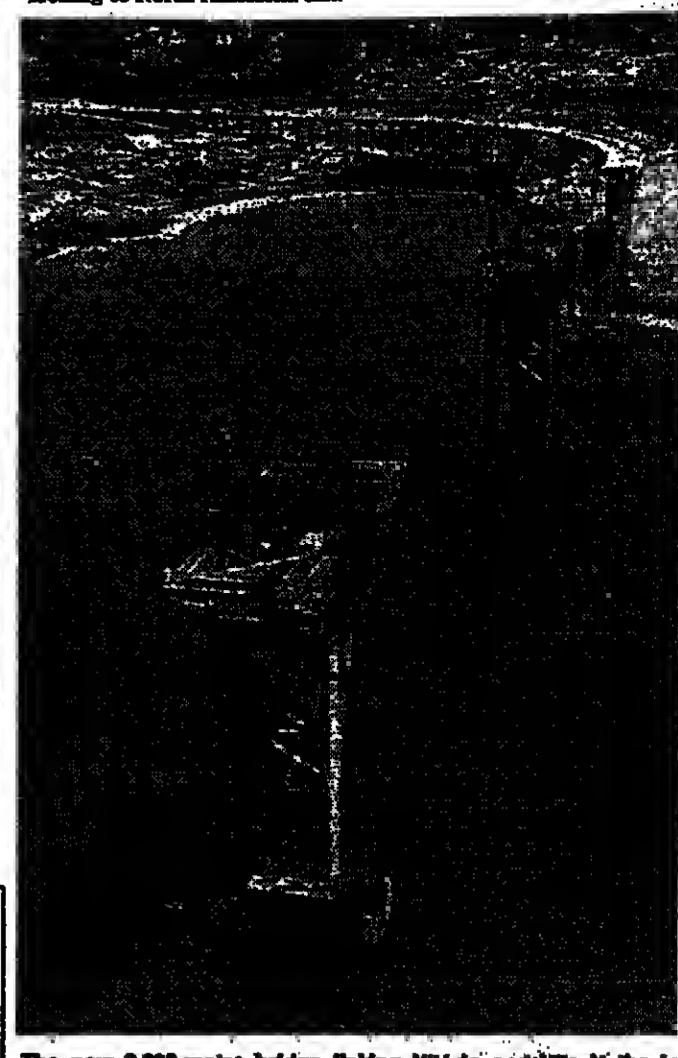
Herberts' concentration will be on car paints applied during manufacture — in which it will have a big fight on its hands against ICI and DuPont combined, BASF, PPG, and Akzo — on vehicle refinish, the repairs sector where ICI and BASF are likely to be its biggest rivals, and highly specialised industrial paint niche markets.

Last year it went into a joint venture with Renault in France and its British arm took over the paint business of Ault and Wiborg. Total sales of the group were DM443m. Herberts now claims 36 per cent of the West German vehicle refinish market, 23 per cent in Western Europe and 7 per cent in the world. It regards 19 countries in Western Europe as its home market and sells in another 24 worldwide. It is now looking to North American and Japanese markets for expansion.

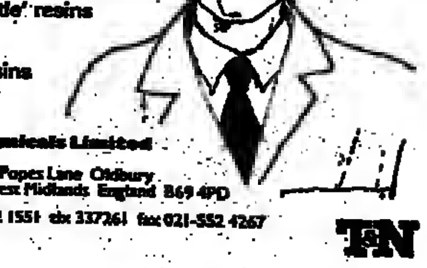
However, this is easier said than done. For all its technical skills, many in the industry will wonder whether Herberts has not taken too long to get itself sorted out to attack world markets. The markets in which it is selling have become globalised and other paintmakers have been much quicker to realise that globally-based customers want globally-spread suppliers.

Indeed, Herberts' problem outside Europe is similar to that of leading Japanese paintmakers outside Japan: nearly all of its major competitors have got in there first, pinning slow starters back in their home markets.

Ian Hamilton Fazey.



The new 3,330-metre bridge linking Vitória and Vila Velha in Esperito Santo, Brazil: the steel structures are being coated, above and below the water line, with protective coating systems to prevent erosion and corrosion



Self-polishing copolymer antifouling being applied to a new vessel in Kiel, West Germany

MARINE PAINTS

Barnacles at bay

PAINTS and coatings for ships, oil rigs and other marine structures represent one of the most international and most highly concentrated sectors of the industry.

Unlike many other important sectors, which remain highly fragmented, the $800m a year world market for marine paints is dominated by a handful of companies.

The leader is International Paint of the UK, which has about 30 per cent of marine market. Other important manufacturers are Chugoku of Japan, Hempel of Denmark, Jotun of Norway, Nippon Oils and Fats, and Sigma Coatings (a subsidiary of Petrofina, the Belgian oil group). These six companies sell about 85 per cent of the paint applied to the world's ships.

The fortunes of the marine paint market naturally tend to follow those of the shipping industry. There was a fairly steep decline in demand for marine paints between 1982 and 1987, but the market has begun to pick up over the past 18 months.

Manufacturers hope that this revival will enable them to raise marine paint prices this year, to reflect the increasing cost of their raw materials. The outlook for the 1990s looks bright; many analysts expect an upsurge in shipbuilding then, as owners replace more of world's ageing fleet of merchant vessels.

The outside of a typical ship has at least five layers of paint. On top of the primer there is likely to be two coats of anti-corrosive paint, followed by two coats of antifouling paint below the waterline or decorative paint above the waterline.

The latest generation of anti-corrosive coatings are tough epoxy paints, designed specifically to protect the hull against the corrosion started by abrasion and mechanical damage. Common causes of damage range from knocking the hull against dockside fenders to abrasion by ice.

Antifoulings release a biocide to prevent barnacles, seaweed and other marine organisms growing on the hull. Fouling not only makes a ship look unkempt but also obstructs its smooth passage through the water and adds substantially to the owner's fuel bills.

Most antifoulings in use today are based on the biocide tributyltin (TBT), but these are threatened by concern about the damage TBT is causing to the marine environment. Most of the concern is focused on small vessels that spend a lot of time close to the shore, and many countries have recently banned the application of TBT to boats less than 25 metres long.

But in the US the federal Environmental Protection Agency and individual state regulatory authorities are introducing more stringent rules, which are expected to make it difficult for many US yards to apply TBT antifoulings even to large ocean-going ships.

In response to this environmental pressure, the paint manufacturers are rapidly developing new tin-free antifoulings. Most of these contain copper-based biocides which are less toxic than TBT. They are still somewhat more expensive and less effective than TBT-based antifoulings but further research and development should bring them up to the same level of performance in due course.

In modern "self polishing" antifouling paints, the biocide is dispersed within a blend of copolymer resins. A slow chemical reaction between the sea water and resins very gradually removes the surface layer of paint and releases biocide. International Paint estimates that the copolymer antifouling technology which it introduced in 1974 has saved the shipping industry $200m per year in fuel costs. Ships can trade for five years without needing a new coat of antifouling.

Coatings for cargo tanks are another important category of marine paint. This is one of the most technically sophisticated areas of the entire paints industry, because general cargo vessels may have to carry a very wide range of liquid chemicals – and their tank coatings must resist attack by any of them.

The best general purpose tank coatings, based on heat-cured epoxy resins, are resistant to more than 2,000 liquid cargoes. Of course there are also more specialised coatings for vessels that concentrate on carrying particular liquids such as methanol and vegetable oils.

Paints for the offshore oil industry represent a distinct subsector of the marine market, with its own separate requirements. The "splash zone" just above the waterline on a North Sea rig, which is regularly soaked with salt water and then dried by wind and sun, is one of the most corrosive environments in the world.

The deck areas of a rig are also subjected to very arduous conditions. They have to survive exposure to seawater and rain, spillage of oils and chemicals (such as drilling and hydraulic fluids) and mechanical damage from exploration and production equipment. The quantities of paint required for large offshore structures run into hundreds of tons; for example Sigma supplied 130 tons of epoxy-based paint for the deck structure alone of the Shell/Esso Dunlin-A platform in the North Sea.

The offshore paints market has suffered a particularly severe decline over the last few years, along with the oil companies' offshore exploration and production activities, and sales are now running at about $80m a year, only half the level of a few years ago. But the offshore market is also due for a cyclical revival soon.

Clive Cookson

Ian Hamilton Fazey on Japan's paint industry

Industrial customers provide strength

WHEN Nissan, the Japanese car giant, decided to set up a factory in Washington in the north-east corner of the UK, it wanted to take Kansai, its paintmaker, with it.

It soon discovered it could not: the agreement to operate the main technology involved in the UK was with Hoechst's industrial coatings subsidiary, Herberts, which actually owned it.

In the US Nissan discovered it was DuPont to the driving seat as licensees of the Hoechst technology. DuPont then went to Kansai to ask that the two companies share their trade secrets in car-painting technology.

The age of the cross-licensing agreement – a sort of technological marriage in which both sides confess all – soon began in earnest. The need for this seems to have come as a shock to some in Japan.

Until recently, Japan's paint industry has been too busy serving its home market to think much about such things. The market is huge. Two paintmakers – Nippon and Kansai – have grown to join the world's ten biggest on the strength of it. However, compared with most Western nations, it is also unusual.

About half of the world's paint is decorative – the paint that people put on the walls and woodwork at home or which companies or public institutions use in their offices and factories. It provides a good cash cow for the industry's big companies.

Japan has no such sizable base. Traditional domestic architecture, with its paper partitions, lacks millions of square feet of internal walls to be decorated. Even today, when many modern buildings in Japan are like any similar ones in Europe or the US, decorative markets are only 22 per cent of sales.

The strength of the Japanese paint industry has come from its industrial customers. Indeed, the growth and success of Japan's paint industry has mirrored the performance of the Japanese economy in the post-war years. However, this has proved both a blessing and a curse: on the one hand it meant an ever-larger home market to service, on the other it gave Japanese paintmakers little experience of operating anywhere else but Japan, although Nippon, the largest paint company is now very active in the rest of Asia.

If Japanese paint was exported in the past, however, it was the stuff already on Japanese goods being sold abroad, not because paintmakers were themselves waging war successfully for world markets. Significantly, total Japanese paint production has virtually stopped growing in recent years with the worldwide reaction to trade imbalances with Japan.

The industry has suddenly found itself at a cross-roads. Many of its customers are setting up factories abroad, but paint is generally not exported directly anywhere: the way to expand abroad is to build factories to target countries or buy existing paint companies already there.

The former is costly and risky, while the race to buy the likeliest targets has been largely won by European and US competitors. With the exception of Nippon in Asia-Pacific markets (see separate article) cross-licensing of technology looks likely to be the most widely followed course.

However, while Japan's paintmakers are virtually handing many of their key customers to foreign counterparts, they have also found that these same counterparts have much to offer to return which can be exploited successfully in the still-huge Japanese home market.

Thus two companies, Shinto and Nippon Oil and Fats, now have licences to exploit ICI's Queen's Award winner – the waterborne car paint, Aquabase – in Japan. They will be trying to take market share off Nippon and Kansai, the market leaders in the car factories.

They also see an opportunity to learn. Mr Teruji Ogawa, chairman of the board at NOF, says: "ICI is the parent here. NOF and Shinto are like ICI's children. We have good co-operation with Shinto to develop this product here."

Kansai would have liked the technology itself. "We approached ICI about this some time ago but ICI was too slow-moving," says Mr Motozo Yamada, president of Kansai. The company has now developed its own alternative to Aquabase, making use of its own special relationship with DuPont.

ICI's decision makes much sense, however, when the structure of Japan's corporate groups is considered.

Part of the strength of the Japanese economy is the sheer bulk of intra-trading is done within six major corporate groups. Each grouping is informal, but the heads of the companies involved meet regularly. Thus the presidents of the 29 companies in the Mitsubishi group get together informally on the second Friday of each month.

These are social gatherings to oil the works of commerce, but they are reinforced by more formal links, such as capital relationships between companies, interlocking directorships, cross-holding of stocks and directors appointed to outside companies and other groups.

Of Japan's paintmakers, Kansai belongs to the Sanwa group – along with Daihatsu Motor – Dai Nippon Toryo to the Mitsubishi group, Shinto to the Sumitomo group and Nippon Oil and Fats to the Fuyo (or Fuji) group, which also has Nissan Motor as a member.

There is no motor manufacturer in the Sumitomo group, but there is no paintmaker in the Mitsui group, in which Toyota Motor has observer status. Shinto has filled the gap with Toyota. Meanwhile, BASF has developed a close relationship with Dai Nippon Toryo, which is inevitably close to Mitsubishi Motors.

Of course, companies in general supply customers across the groups – such as Kansai selling paint to Nissan – but members of the same group function as a type of club, so relationships are inevitably easier.

By going with NOF and Shinto, ICI has an insider's introduction to both Nissan and Toyota, the two Japanese car manufacturers building most factories abroad. Even in the US, where Nissan's relationship is with DuPont, there should be an inside track from DuPont and ICI having a joint venture on car paints in Europe.

As Mr Ogawa puts it: "We have better relations with Nissan than with other companies. Long ago we were part of the same company. There are very many meetings at the top level between chairmen. We use the relationship to test technology.

"We have introduced Nissan to Aquabase. There is an intention for a joint study through the medium of our good relations with them. It is impossible to let them use the technology as it is. We have to modify it on a plant by plant basis. Also, Nissan in the US is a separate company and they don't work in the same way."

Meanwhile Nippon Paint, which does not belong to any corporate group but enjoys a venerable status in Japanese industry by virtue of market leadership and age – it can trace its origins back 180 years – has close relations with International Paint of the UK and PPG of the US.

The former is the world's leading marine paintmaker, the latter has a justifiable claim to market leadership in basic car painting technology against the rival system of Herberts. By keeping its cross-licensing agreements simple, Nippon believes it will save itself a lot of trouble later, for the developing world network of cross-licensing is getting increasingly more complicated, if not confusing.

For example, Kansai is close to DuPont, which is close to ICI, which is close to NOF, which has long been close to Inmont, which was taken over to 1985 by BASF, which has a joint venture with Tanabe of Japan and is close to Dai Nippon Toryo, which has licensed ICI with some of its car paints in Malaysia.

Mr Yamada says that Kansai has e longstanding friendship with both ICI and Hoechst. Now NOF and Shinto will be attacking Kansai's market share of industrial markets using ICI technology. Kansai's fightback will be through its relationship with DuPont, ICI's partner in the same European markets. It is also developing links with BASF.

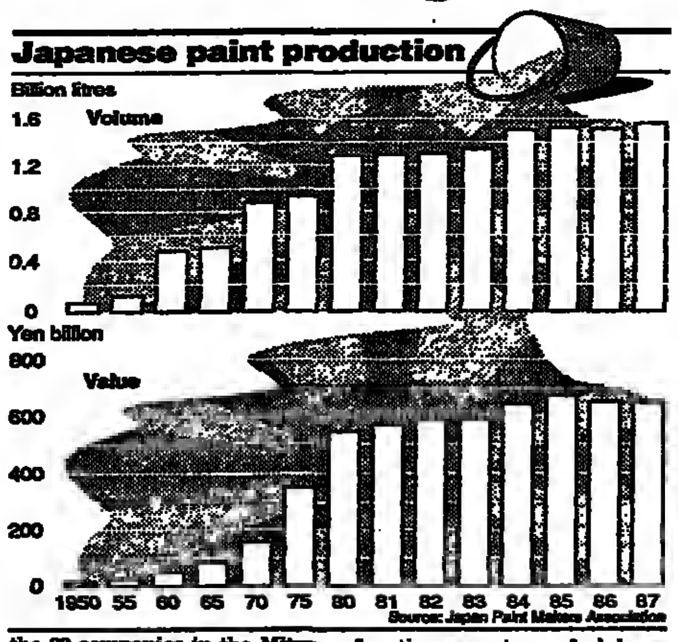
European and US paintmakers have no problem with this. They are used to legally watertight agreements about specific technology in specific geographical markets. Formulations are patented and licences enforced. The industry is thought too small in terms of numbers of large paintmakers for anyone to get away with pirating.

The Japanese, unused to such complications, will probably have to see it all working to learn to relax about it, although Mr Kiyohiko Chijiwa, head of corporate planning at Nippon, thinks there will be "some divorces."

Mr Yamada of Kansai, who is also president of the Japan Paint Makers Association, reflects the general view: "I think there is a state of confusion over these cross-agreements. It can be settled in the future but it's confusion now."

But, as Mr Ogawa of NOF puts it: "There is a brotherhood of paintmakers which can be compared with our corporate groups." Japan's companies are used to developing good relationships and operating through them. They will no doubt be teaching their licensors a lesson or two.

Japanese paint production



Source: Japan Paint Makers Association

Ian Hamilton Fazey on the differing approaches of European and Japanese producers as . . .

Battle for Far East markets hots up

A FLAVOUR of the battle now raging in South East Asia to sell decorative and industrial paints comes over strongly in the following words from Mr Lim Say Choug, managing director of ICI Paints in the region.

He says: "Don't judge us by European perceptions of risk-taking and the way of doing business. Our competition is basically Japanese. They have a very different business philosophy. They are prepared to make little profit and live with low prices for a long time. If you don't put up a fight against the Japanese they will just run over you.

"They give long term credit on low prices. If you say that you are not interested in that sort of business because it only yields 2.5 per cent profit, they will do it at that level. They then gain in total market share, building up a strong position to give them leverage among distributors and sales outlets, and they then start fighting you with better, higher-priced products.

"We have to make profits acceptable to the City of London year after year. They don't. They take a 25-year view of their business. They are different and Asia is different. If we stick to the European way, they will walk all over us in the end."

There are few foreign paint companies operating seriously in South East Asia, mainly because paint markets have only just started to develop there. In the past, the mass of the people's homes were just not painted. With little manufacturing industry, there were few industrial markets either.

All that is changing. Industrialisation and increasing income from local ownership of important commodities has resulted in a growing affluence. There is also increasing political stability in the region now that the transition from colonial rule and the Vietnam war are well over.

Critically, there is continuous, fast economic growth. Why this matters to the paint industry is that paint consumption follows the change in any country's gross domestic product. In developing countries, growth and affluence lead to more people painting their homes — and more often — as well as a parallel growth in industrial markets as cars and consumer goods are manufactured locally.

In 1987, Singapore's economy grew by 10 per cent, Malaysia's by 7 per cent, Thailand's by 8 per cent, the Philippines' by 6 per cent and Indonesia's by 4 per cent. Together with Brunei, these are the ASEAN countries, a developing economic community where the technological industrial base is growing.

There has been strong recovery after the regional recession of 1984-86 — which was caused by falling commodities prices — bnt even then Malaysia's economy still managed 2 per cent growth. This has been encouraging enough to persuade ICI to build paint factories in Thailand, Malaysia, Singapore and Indonesia.

International Paint has also set up in Singapore, where there is a growing market for its marine paints, and in Malaysia, where it has targeted the canning industry as a principal customer, and in Bangkok. Japan's Nippon Paint is the only other big paintmaker approaching the region with similar levels of investment and commitment.

Mr Kiyohiko Chijiiwa, head of Nippon's corporate planning, says: "Early entry into foreign markets is part of our corporate strategy. Shipbuilding went overseas and we had to follow. Customers like the automotive, shiprepair, and electrical industries have gone international and so we have to go international too. We have high technology for sophisticated paints.

"In South East Asia, however, labour costs are low. This has encouraged two strategies — first, to develop in such overseas markets ahead of others and, second, to develop low cost products by making paint locally."

It is the latter part of the strategy that has been exercising Mr Lim. ICI's headquarters for the region are in Kuala Lumpur and it is Malaysia that the initial skirmishing has been taking place, with each feeling out the other for weakness. Four-fifths of Malaysia's paint market at present is in the decorative sector.

There are three market segments within the sector: the quality end, comprising about 15 per cent, where the top prices can be charged; a broad middle segment, representing 52 per cent of the volume; and the cheap end of the market, accounting for a third of sales.

Mr Lim says: "Simple emulsion costs M$5 (about £1) per litre. The Japanese sell it at M$2 per litre. It's a mistake to say that it doesn't matter because that is the sort of business we don't want to do because we only operate at the quality end of the market."

Nippon proved why. It quickly established share and then started to bring some better quality paints onto the market. "When the Japanese got into the mid-tier of the market from the bottom tier we decided to give them some trouble," Mr Lim says. In the early 1980s ICI moved into the mid-tier from the quality end of the market with a lower-priced brand.

The cans carried the ICI roundel as a guarantee of quality, but this was dropped unnoticed after the new brand had established itself. The effect was to put a lid on Nippon's march upmarket. ICI now claims leadership, with 27 per cent against Nippon's 24 per cent.

Berger Malaysia — owned now by Sime Darby, which is, ironically, the landlord of ICI's Asean headquarters in Kuala Lumpur — has 10 per cent, the same as Seasons, a local producer.

The skirmish has been important in establishing a willingness to do battle among all protagonists. Mr Lim thinks this will pay off in fast-growing industrial markets for Japanese goods now being made in South East Asia rather exported directly.

A key date here is 1991. Foreign companies can set up joint ventures in basic or strategic industries in the region, with Asean countries taking a 5 per cent stake each and the company having 60 per cent, provided the deals are concluded by that date. A rush of investment is expected in the next two years.

Only the makers of industrial paints already there are likely to be able to benefit by supplying coatings for goods made in the naw factories, which bodes well for ICI, International and Nippon. Licensing deals with Japanese manufacturers and their paintmakers back home are in the offing.

"Japanese paintmakers will do deals in industrial products because they know now that we will fight and cause them a lot of trouble if they try to come in directly. They appreciate that half a cake is better than none," Mr Lim says.

Nevertheless, UK paintmakers are going to find South East Asia a continuing long fight in the next 20 years. The prizes are vast because on population size alone, many national markets are the size of those in Europe. Vietnam is seen by all protagonists as a very promising market in the long run and even Kampuchea is being studied for when peace and political stability can be assured.

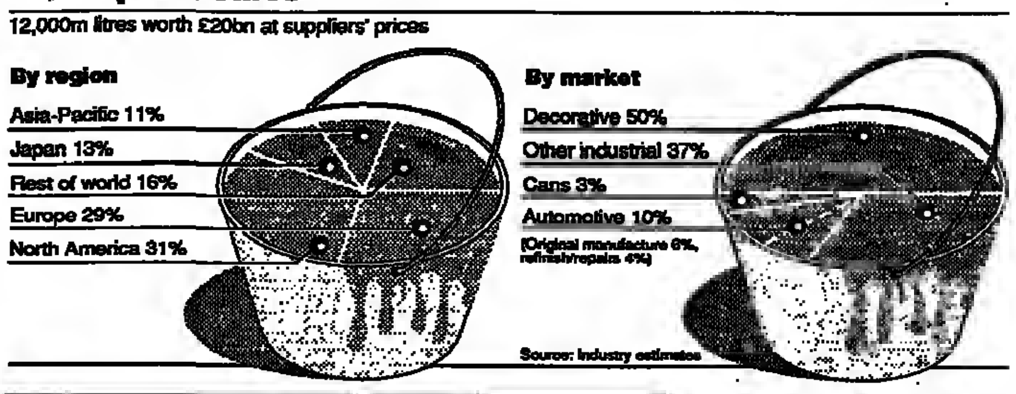
Mr Scott Davidson, executive director of ICI Paints worldwide and director of Asia-Pacific markets, says that a steady investment of £15m a year will be essential. Ha says that ICI is growing at a rate of 10-12 per cent a year in the region and has developed a great competitive advantage through its well-tried distribution systems, its transferable marketing skills and strategic support from the West.

It aims to develop Malaysia and Singapore as centres of excellence.

A new research and development facility in Singapore will be one big investment. Mr Lim says it will be staffed on a multinational basis to get over local rivalries and the dangers of new ideas suffering from the "not invented here" syndrome.

Meanwhile, Nippon will continue to exert inexorable pressure. Mr Chijiiwa says: "In Malaysia we are investing now to sell tha name of Nippon Paint in the market." He does not see the company caught in a low-price trap. "If we have a firm and certain share and have a certain volume, profits will follow eventually. Share plus turnover is best. Expanding turnover is profit. If an economy is growing, extending the turnover covars the enlarged cost in the market." He also points to Nippon's other long tarm weapon, adding: "Shareholders in Japan are banks or other financial organisations. Therefore they do not complain about profit in the short term. In the US and Europe, the shareholders want profit in the short term, or they will want to fire the management." The war for market dominance in the South East Asian theatre looks like being a long one.

World paint sales



Coke cans: a valuable market for paint and lacquer producers

PROFILE: AKZO

Sights are set East and West

AKZO, the Dutch chemicals group which has emerged as the world's number five paint producer after a series of mainly European acquisitions and an industry-wide shake-out, has turned its sights on the US and growing Far Eastern markets for future expansion.

At present, three-quarters of the Akzo coatings division annual turnover of Fl 2.79bn (1988) is generated in Europe, a market which accounts for roughly just a third of total world paint sales.

Most of the division's 12,400-strong workforce is concentrated on the continent as well. In the European market, Akzo is already established as the leading producer of decorative paints.

Its brands include Sikkens, Levis and Permoglaze which are all marketed under the new Akzo corporate logo which was introduced with much fanfare early last year.

The company also has a strong position in the automotive finishing and refinishing market, industrial and other protective coatings, and in aerospace finishes.

While the group freely concedes that its European coatings position has been considerably strengthened, it remains inadequately represented in other important markets.

Akzo has done a great deal in recent years to strengthen and solidify its continental position; it filled a gap in the UK with acquisitions of Sandtex and Blundell-Permoglaze (both decorative paint producers) in 1986. That same year, it acquired Levis in Belgium (decorative, automotive and industrial).

Last year, Akzo was given another unexpected boost by the decision by Hoechst of West Germany to withdraw altogether from the decorative paints market. Then, early this year, it took control of the Barcelona-based Procolor group, which claims a 25 per cent share of the Spanish decorative and industrial coatings market.

This is not to suggest that all recent expansion has been concentrated in Europe.

In Central and South America, it bought out Tintas Ypiranga of Brazil at the end of 1987 (a decorative coatings maker), and in Mexico took over the general paint company (which is also in the decorative line).

The group declines to reveal the level of investments by the coatings division or the amount spent on acquisitions. But Mr Marinus Roosenboom, Akzo Coatings executive vice president did say: "I think we have seen the bulk of restructuring in the industry already."

"In Europe, we feel we have filled the gaps and come out with a well-balanced product and country mix. The next growth areas with be in the US and Far East."

The US generates only about 10 per cent of the coating division's total turnover, while the booming Asian market accounts for less than 2 per cent.

In the US, which generates 31 per cent of overall world paint sales, Mr Roosenboom specifically picks out two key markets, industrial coating systems and auto refinishing, where Akzo "is building up its position. We don't exclude the possibility of further acquisitions here."

Currently in the US, Akzo owns Wyandotte (automotive, coil and industrial coatings), Lanchem (resins), and Bostic (aerospace), all acquired since 1983.

In the growing Far East market, which now generates a further 24 per cent of total world sales, the target countries are Indonesia (in the field of car refinishing), and Japan (in car refinishing and industrial coatings).

In Thailand, the recent decision by the Daf commercial vehicles group to build up truck assembly facilities could provide Akzo with an attractive opportunity in the automotive finishing business, Mr Roosenboom says.

The drive to diversify geographical spread coincides with a broader policy by the Akzo group as a whole to improve its global profile.

The group, which had a total turnover last year of Fl 16.59 bn and employs 71,000 people, has applied for a listing on the Nasdaq exchange in the US, and recently acquired a network of representative offices on the growing Chinese market.

Significantly, the expansion by the coating division has been accompanied by a solid improvement in profitability. Operating profits as a proportion of total sales were on a downward path from 1983 until 1986, when the internationalisation campaign took hold. By 1986, the operating result had fallen to 5.7 per cent of a Fl 1.79bn in turnover.

"We do not exclude the possibility of further acquisitions"

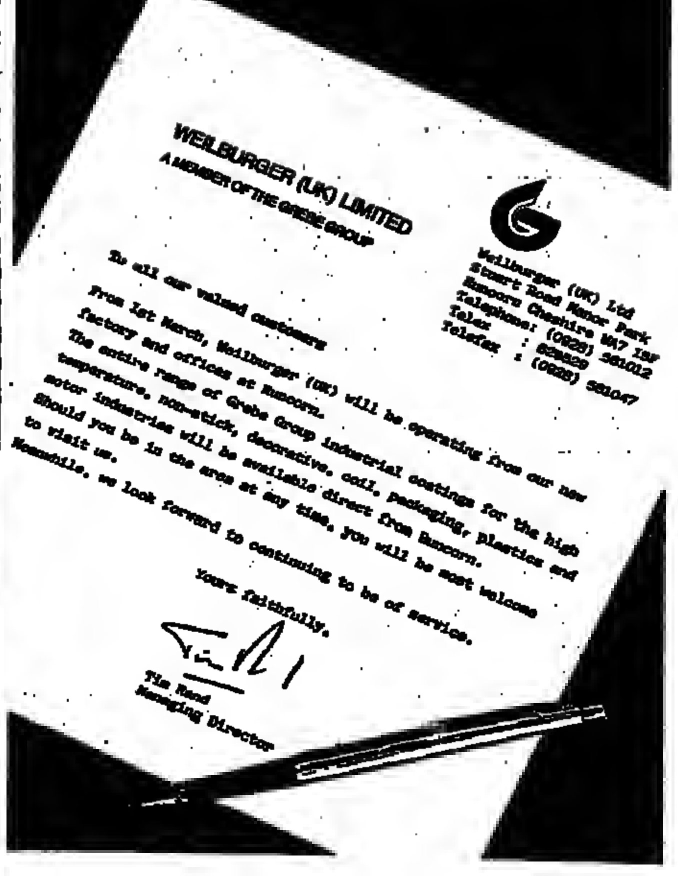
Then, following a series of acquisitions, earnings started upwards again and by last year had climbed to 7.5 per cent (or Fl 210m) of Fl 2.79bn in sales.

Of the total coatings division workforce, 1,300 are employed in research and development activities. Spending on R&D last year was 4 per cent of total sales.

Companies like Akzo will inevitably face higher costs as demands for a cleaner environment climb higher on the Dutch and European political agendas.

Emission of solvents is a problem, concedes Mr Roosenboom. The response, so far, has been to place a "strong emphasis" on the development of water-borne, rather than solvent-borne, coating solutions especially in the industrial coatings field.

David Brown



POWDER PAINT

A timely product

HALF THE new cars produced in the US this year will have coloured aluminium wheel hubs, all of which will be decorated by powder coatings. This particular fashion in cars is just one example of how powder coating, one of the fastest-expanding areas of the paint and coatings sector, is finding new areas of business.

The market for powder coatings is growing by between 10 and 20 per cent a year according to industry estimates. But the promise of a fast-growing business has tempted many companies into the market, particularly over the past two years. That has resulted in hot competition and low margins, squeezing many medium-sized and smaller companies.

In the US, for example, there are between 25 and 30 powder coating suppliers, whereas two years ago there were less than 20. Leading the market are the giant paintmakers, such as the Ferro Corporation, of Cleveland Ohio, and Glidden, part of ICI.

Initially a European development, powder coating was first adopted in Europe in the 1970s. As a result the battle for world market share in powders is now being fought in the US and Far East, which are both comparatively immature markets. In the US, where about 45,000 *tons of* powder coatings will be produced this year, estimates put the growth rate as high as 20 per cent, compared to only 10 to 15 per cent in the UK, for example.

Internationally, the UK company International Paint is fighting it out with Ferro, of the US, for the number one world position. In Europe DSM, the Dutch chemicals company, has a dominant position, whereas in the UK four companies have over 80 per cent of the 16,000 ton market: International Paint, Ferro, Beckers, the Swedish paint and coatings group, and Postans, part of tha Evode adhesives group.

Postans, of Birmingham in the UK — it also has a joint venture, Evodex, in Birmingham, Alabama — developed the Syntha Pulvin coating for protecting architectural aluminium, now widely seen in the coloured window frames of modern buildings. Clever and aggressive marketing by Postans, which involved selling the coating through a network of approved companies which could apply the powder, gave the firm a clear market lead in the UK for this type of architectural coating. "It was the right prodnct at the right time," says Mr Steven Jacques, general manager of Postans.

In the US and Far East powder coatings are still taking market share away from wet paint. Although the cost of replacing wet paint spray booths with a whole new range of equipment is high, companies are being persuaded that powder gives a better quality finish and can be cheaper to apply in the long term. (Powder works out less expensive than wet paints because it only needs one coat).

Government legislation, health and safety regulations and consumer pressure are all pushing companies towards powder because it has a less damaging effect on the environment - powder coatings were developed first in Germany because of the stringent regulations on pollutants.

Powder gives a better quality finish and can be cheaper

As well as avoiding the problems of emission, caused by the solvents in wet paints, powder coatings also avoid the problem of waste disposal. After equipment manufacturers have sprayed their products with wet paint, there is a residual waste which has to be carefully disposed of. Mr Peter Gribbel, associate director of research for powders at Glidden, estimates that it can cost manufacturers up to $1,000 a drum to dispose of wet paint sludge in the US. With powder paint there is minimal waste, as any stray powder is collected and then re-used.

Powder coatings are a precisely formulated mixture of pigment and resin which are sprayed using electro-static spray guns. The item being coated — which can be any metal object including double glazing frames, motor components, bicycles, office equipment and domestic appliances, such as refrigerators and cookers — is then heated to 180 deg C for about 10 minutes to cure the surface.

The more expensive polyester resins have been developed for sxterior paintwork and where heat resistance is needed, whereas epoxy resins are used for coatings which need to be chemically resistant. Over half the market is for an all-purpose hybrid of the two.

Although the market is still fuelled by growth as companies replace their wet paint spray booths with powder ones, manufacturers are already looking for new market sectors which could use powder coatings, particularly for the European market. They range from car engine blocks to the baskets inside automatic washing machines — that is a particular growth area in the US at the moment.

One of the targets in Europe is to sell coatings for the steel reinforcement bars used in concrete, in an attempt to prevent deterioration. (The coating prevents acids in the concrete or rainwater from causing the steel to rust.)

In addition, powder coatings are now replacing other types of finishes, such as vitreous (porcelain) enamel for domestic appliances — because powders cure at much lower temperatures — and metals for plating, a technique which is also bedevilled by environmental issues.

Powder makers are also taking on the plastics market — coloured plastics are one of the biggest threats to paintmakers. Developments are now in hand to develop a powder which can be cured at much lower temperatures, or without heat at all, so it can be used in conjunction with very cheap plastic which has no inherent aesthetic properties.

As new polymer architectures widen the range of properties of the coatings, powder manufacturers are trying to make thinner films, powders which cure more quickly and ones which have better application properties. In particular, they are trying to develop new finishes.

Most manufacturers are working on high gloss finishes which could eventually be used for car bodywork, says Mr Peter Rogers, chief executive of powder operations for International Paint — "even if they won't admit it!", he adds.

Della Bradshaw

Paul Abrahams looks at a new niche market to stop paint sticking to the wall

Halting Kilroy's progress

MOST of the articles in this survey are about ensuring that paint stays on. But sometimes paint reaches places where it shouldn't. A small, but now a niche market is beginning to appear for prodncts dealing with the problem of graffiti.

The trouble is that Kilroy, the universal hero of the graffiti writer has been here there and averywhere these days. And his vandalism is becoming increasingly international.

As a result, bedevilled by the fashion in pop-art graffiti, administrators from the subways of New York to the metro of Paris and from American urban housing projects to public buildings in Rome, are turning to scientists for help against the spray-can invasion.

They have realised that underground systems and public areas need to be reclaimed. Graffiti is a problem that managements can no longer afford to ignore.

A recent report on crime and safety on the London underground — admittedly before the King's Cross fire — showed that the public was more concerned about the scale of graffiti than the level of serious crime.

"It's terrible business to leave graffiti," explains Mr Jared Lebow, a spokesperson *for the New York Transit* Authority. "It gives the passenger a sense of anarchy and provides a clear disincentive to travel."

Since beginning an anti-graffiti campaign in 1984 — which aims to keep both trains and stations clean — ridership on the New York subway has increased by 6 per cent, says Mr Lebow.

The scheme provides cleaners at every terminus so that not a single carriage in tha scheme makes a return journey with graffiti.

An item of graffiti remains less than two hours on a train, says Lebow. This takes away much of the incentive for the artist who is motivated by seeing his work travelling round the system.

Public administrations are also beginning to take the graffiti problem seriously. In Rome, the local authorities have just signed a contract to clean 80,000 square metres of building in preparation for the European Cup in 1990.

In the US, Federal authorities are considering providing funding for the New York City Housing Authority. This follows a successful anti-graffiti pilot-project which covered 30 buildings.

The new scheme should cover about 15 per cent of the 220,000 dwelling units and 311 housing developments under the authority's control.

"We found that if we removed the graffiti right away, the artists disappeared and went elsewhere," says Mr Paul Christiani, assistant to the departmental director of management for technical services at the authority.

"The clean environment helped install a sense of pride among the residents and helped keep the ground clear. It also had a spill-over effect and helped to motivate both staff and residents," he says.

But graffiti eradication does not come cheap. The New York transit police estimate that the cost of cleaning the "tags" of one particular artist off 80 cars was more than $63,000 (£35,470).

At one stage the anti-graffiti campaign was costing the New York Transit Authority more than $33m (£18.6m) a year.

Elsewhere, costs of anti-graffiti programmes have also been high. The Regie Autonome de Transport Parisien (RATP), which runs the Paris metro system, has recently increased spending from FFr14m to FFr30m a year to combat the problem.

Graffiti is removed by water jet prior to covering the wall with a resistant coating to which paint will not bond chemically.

The recognition by authorities that graffiti has to be controlled has had significant effects on the growth of the market for anti-graffiti products, according to Mr Malcolm Rogerson, general sales manager at Croda paints, one of the leading manufacturers of anti-graffiti products in the UK.

"The market for anti-graffiti materials is small at present," he says. "But it is clearly going *to become a major market* as local authorities become more aware of the beneficial effects of eradication."

Graffiti eradication does not come cheap. The New York transit police estimate that the cost of cleaning the "tags" of one particular artist off 80 cars was more than $63,000

Mr Rogerson estimates that the UK market for these materials is about £4m a year. However, that market is growing quickly, he believes, as county councils and local authorities realise the benefits of the dealing effectively with the problem.

The potential for the growth of this niche market is certainly impressive.

According to T&R Williamson, the Yorkshire-based paint company, the damage caused by graffiti in the UK alone accounts for £200m a year.

In the US, Stamford-based Graffiti International, one of the leading graffiti removal companies on the East Coast, has seen spectacular growth since it began in 1988. During its first year, turnover was $500,000 and is expected to reach $3m in 1989.

The realisation that anti-graffiti products could become an important growth sector has meant that a number of major UK paint producers have or are moving into the market. These include Lancashire-based Crown Paints, *Macpherson, the Bolton-based paint* supplier and T&R Williamson, the UK's oldest paint manufacturer.

However, anti-graffiti product manufacturers are faced with some difficult technological problems in providing a comprehensive service.

Many early anti-graffiti solvents contained powerful solvents which damaged surfaces as well as removing the paint. Others required abrasion which tended to leave a ghost image of the original design.

A further difficulty is that spray paints tend to sink into walls with absorbent surfaces and are therefore almost impossible to remove. The only remedy used to be repainting - an expensive and labour intensive process.

One answer to these problems has been to create lacquers which are painted on to the walls. Very often polyurethane based, manufacturers have been attempting to create a formula that is:

- Inert, so that the paint does not react with the surface and become ingrained.
- Strong enough to resist both violent impact and the abrasives and solvents needed to remove graffiti paint.
- Fire resistant, *so that it can* be used on underground systems.
- Flexible so that it can be applied to most surfaces without cracking with age.
- Able to avoid colouring with age.

The development of anti-graffiti coatings has also had an unusual spin-off. A system created by Graffiti International, a US company based in Stamford, is being tested at the moment as a method of protecting buildings and monuments from acid rain.

The invisible coating is applied to the limestone and sandstone monuments — which are most affected by acid rain and exhaust pollution — and absorbed into the stone to create a neutral blocking agent.

The company claims that the product makes the stone stronger and prevents the acid penetrating.

It expects that it could prove popular in Europe which has a greater density of buildings in need of protection.

PROFILE: ICI

The giant looks for more

THE EVER-widening bounds of the ICI Paints empire were disclosed officially last month in ICI's 1988 results. Sales were £1.36bn, up £70m on the year before. Profit rose to £98m – just enough to improve the return on sales by 0.08 points to 7.19 per cent.

The performance is poor compared with the 26 per cent profit-to-sales ratio of ICI's *pharmaceuticals business*, or even the 12.6 per cent return for the group as a whole. But it is more than twice as good as the return made by Japan's largest paintmakers and nearly 50 per cent better than BASF, ICI's West German arch-rival.

The comparisons reveal ICI's dilemma over paint. As a performer *it is a laggard within* the group while being an outstanding international competitor in its own industry. How much capital can it be allowed to tie up when these two conflicting aspects are set against each other?

ICI Paints manufactures in 29 countries and sells in 50. Its *competitors acknowledge its* marketing of decorative paint for homes and other buildings – the Dulux brand in the UK and Australia – as the best in the world. It excels in the highly specialised paints for repairing car bodies, dominates in some markets for painting the insides of cans with protective lacquer, and is a good competitor in other industrial markets.

To remain competitive and build world market share it needs considerable, continuous investment in research and development – up to 5 per cent of sales in some sectors – and constant reinvestment in new *plant. The figure* has worked out at £525m for capital projects in the last three years alone.

Its weakness – as seen by competitors in Japan and West Germany – is that its financial performance must satisfy ICI's City shareholders year by year. Their own backers, mainly banks and similar financial institutions, take a longer view about what is good for their businesses and do not mind trading short-term sacrifice for eventual, permanent gain.

At the same time, the world's paint industry is facing the twin pressures of over-capacity and rising costs – particularly of raw materials and the technical service needed to support high technology industrial coatings, and from increasingly tight anti-pollution laws.

Yet with so many competitors, pricing pressure is downwards. Mr Herman Scopes, principal executive officer of ICI Paints, sees a crunch coming. "Eventually economic realities manifest themselves and you get a shake-out," he says.

His major long- term task is to ensure that it is other paint companies which fall by the wayside, not ICI. The ICI Paints approach to its dilemma appears now to have crystallised into getting more out of what it has and committing itself worldwide to its customers so as to build their *long-term loyalty.*

To do all this will require a widespread reorientation of the way the company sees itself and what it does. The process is under way, but there is no guarantee that it will succeed because of the sheer scale involved of change in corporate culture.

Its weakness - as seen by competitors in Japan and West Germany - is that its financial performance must satisfy ICI's City shareholders year by year.

Exactly what is being *attempted is described by Mr* Scopes in these terms: "We have got to stop being a paint manufacturer and become a service organisation that has paint manufacturing as part of its operations." It sounds simple, but it is a Herculean task for a £1.36bn business scattered all over the world. Like most of *the rest of the industry, ICI has* made paint and sold it. Now it is going to sell a service – and provide the paint that will fulfil it.

It sounds subtle, possibly esoteric, but it requires a sea change in attitudes. The drive is centred on quality and service. "Delivering quality and service to the customer is the responsibility of everyone, not just the sales rep," Mr Scopes says. It means getting invoices right, dealing with telephone queries promptly and delivering on time.

He also says that the new attitudes cannot be imposed: "I am a great believer in not emphasising this quality of customer service initiative from the top. We want to create a climate in which there is a grass roots questioning of what we are about."

Mr Brian Codling has been put in charge of the initiative in the UK and given an office on the directors' floor in ICI Paints' world headquarters at Slough to emphasise the importance of his job. He says: "The application of technological knowledge out there in the marketplace is what we and our customers are going to use to add value to everything we do."

He is working with clear corporate goals for the whole business, beginning with the need to consolidate after the 1986 acquisition of Glidden – then *one of the US's largest paint*makers in its own right – and the very act which made ICI the largest paint company in the world.

The second goal is focused growth – *ICI is good in some* markets and has targeted others for improvement – while the third goal is the need to *constantly improve quality in order to achieve better margins* and service, in spite of rising costs and static prices.

"It's also a hell of a lot better to build on things you are good at than to eliminate your weaknesses," Mr Codling says. These include a global spread and balance, very large financial resources, a good techno*logical and commercial base*, a general management which competitors acknowledge as good, and clear strategies.

There are problems. Staff surveys showed disquiet at big-company bureaucracy, inadequate internal communications, lack of recognition of people's contributions, and internal – rather than customer – orientation.

A bigger shock was to come: only a large minority of customers rated ICI better than its competitors. The bulk opted for the "much the same" category, while a small minority declared ICI worse. Jolted by a roadshow at which Mr Codling presented such information, the grass-roots movement Mr Scopes is hoping for is now beginning to emerge.

Voluntary "customer focus" groups of six to eight people each have started up and there are now 400 of them, all trying to think of ways of improving service – and meeting in their own time to do it.

Benefits so far have been a flow of good ideas, better commitment to customers at all *levels, the pinpointing of* things which irritate customers, better teamwork, and the identification of training needs. Similar programmes are under way in the US at Glidden – where the emphasis is on statistical process controls to improve production quality – and in Australia, where Mr *Doug Curlewis, managing* director of ICI Dulux, might even be thought to be living dangerously.

He says: "We have four key principles: customer first, profit second; the customers define what is meant by good service; ways have to be found to measure service achieve*ment; and senior management* has to devolve accountability to staff.

"The manager's job is to support the staff. Customers are simple folk. They merely want what they order, in the quantity they ordered it, and arriving at the time they asked for it to be delivered."

Checks showed a success rate of only 55 per cent using this as the criterion. There was a 96 per cent overall orders-to-deliveries ratio, but that was not point. If a tiny part of any order were missing, that order was wrongly filled and the customer was not 100 per cent happy.

"Therefore if an order is not 100 per cent correct, the transaction is a failure and recorded as such. We are going to pay everyone a A$1,000 bonus each if we get to 90 per cent by September," Mr Curlewis says.

The bonus is unbudgeted but he believes that an unforecast sales increase will have been achieved too if he has to pay it. It could be a big "if" – with eight months to go, the board on the lawn outside the headquarters office block in Melbourne was still at only 60 per cent, illustrating what a tall order it is to change any large company's corporate culture.

Ian Hamilton Fazey

WOODCARE PRODUCTS

UK stain sales rise sharply

THE WOODCARE market is showing healthy growth in the UK. This sector covers almost every coating for wood except conventional paint: both functional products – wood preservatives and treatments to eradicate infestation by fungi or insects – and decorative products such as stains and varnishes.

Total UK sales of woodcare products amount to about £160m (at retail prices) and are growing at 8 per cent per year. About two thirds of these products are sold directly to consumers through DIY stores; trade and industrial users account for the remainder.

The most dramatic growth in the woodcare sector is in decorative woodstains. Their sales are increasing by about 40 per cent per year. This growth is driven partly by fashion; more and more people in the UK like the Continental look of natural wood finishes inside and outside the home, instead of painted surfaces. Another factor is that woodstains are generally cheaper and easier to apply well than conventional paints.

In contrast to the spectacular sales growth of stains, demand for varnishes has been almost static. However Cuprinol, the Crown Berger subsidiary which is the overall market leader for woodcare products in the UK, hopes to shake up the varnish market during 1989 by introducing a new range of water based acrylic varnishes.

The company believes that these will appeal to consumers more than the solvent-based polyurethane coatings which now dominate the UK wood varnish market, because they dry more quickly and are free of the unpleasant solvent odour associated with polyurethanes.

The functional side of the woodcare market has been overshadowed by controversy over the safety of some pesticides in wood preservatives, in particular lindane, pentachlorophenol (PCP) and tributyltin oxide (TBTO).

Environmental campaigners have drawn a connection between lindane and human blood disorders such as aplastic anaemia, while PCP has come under suspicion because highly toxic dioxins may be produced as impurities during its manufacturing process.

Concern about TBTO is focused mainly on the damage it causes to marine life when it is used as an *anti-fouling agent* on ships.

Although a few countries have been banned lindane and PCP in wood preservatives, the Health and Safety Executive continues to insist that there is insufficient evidence to ban them in the UK. Even so, Cuprinol has recently phased out all three chemicals. Instead it uses acypetacs-zinc as the fungicide and permethrin as the insecticide in wood preservatives. Mr Philip Medcalf, managing director of Cuprinol, says that these alternative pesticides work just as well as lindane, PCP and TBTO.

A *quite different sort of dis*pute concerns the concept of "microporous" coatings for wood. Several manufacturers promote their products as having "*microporous*", "vapour permeable" or "breathing" technology. The idea is that any moisture which is present in the wood or which enters through open joints, splits, nail holes and so on can escape easily through the coating in the form of water vapour. This should reduce the risk of the wood rotting or the finish blistering and peeling.

But there is now something of a backlash in the industry against making claims about microporosity, on the grounds that excessive marketing hype has exaggerated the benefits of *vapour permeable coatings* and confused consumers.

Mr Mike Byford, technical manager at Sadolin (UK), says that extensive tests by his company and *independent* laboratories "have now indicated that there is no evidence to support claims that moisture vapour permeability is an important property in wood finishes. There is still no better way of getting longer life than to be sure the substrate is dry and unweathered before application of the finish."

Indeed, making the same point more generally, it is more important to have the right wood in the right condition than to worry about the qualities of the woodcare product.

Clive Cookson

RESTRUCTURING THE WORLD PAINT INDUSTRY

COMPANY	ACQUISITION	YEAR	SECTOR
Akzo (Netherlands)	Wynadotte (US)	1983	Motors
	Levis (Belgium)	1984	Decorative/motors/industrial
	Bostik (US)	1984	Aircraft
	Blundell-Permoglaze (UK)	1985	Decorative
	Sandtex (UK)	1986	Decorative
	Procolor (Spain)	1988	Decorative/industrial
	Brink Molyn (Netherlands)	1986	Decorative
	Ypiranga (Brazil)	1987	Decorative/industrial
BASF (W.Germany)	Valentine (UK)	1984	Vehicle refinishing
	Inmont (US)	1985	Motors/refinishing/can coatings
	Mobil Coatings (Netherlands)	1985	Can coatings
	Lusol (Argentina)	1988	Motors/industrial
DuPont (US)	Ford Motor Paints (US)	1988	Motors
	SFDUCO (France) - part	1988	Motors
	IDAC (joint venture with ICI)	1988	Motors
Hoechst (W.Germany)	Renault Paint (France)	1986	Motors
	Ault & Wiborg (UK) -part	1986	Motors/refinishing/industrial
	Divested - part W.Germany	1984	Decorative
	Berger (UK)	1987	Decorative
ICI (UK)	Holdens (UK)	1982	Can coatings
	Valentine (France)	1984	Decorative/refinishing
	Ault & Wiborg (UK) -part	1985	Can coatings
	HGW Paints (Ireland)	1985	Decorative/refinishing/industrial
	Knopp (W.Germany)	1986	Powder coatings
	Glidden (US)	1986	Decorative/can coatings/powder
	Bonaval (W.Germany)	1986	refinishing
	Attiva (Italy)	1988	Can coatings
	DuPont (Spain)	1988	Powder
	Berger (Australasia)	1988	Decorative/industrial
	IDAC (joint venture with DuPont)	1988	Motors
International (UK)	Sitap (France)	1982	Powder
	Litoverti (Brazil)	1982	Can coatings
	Oxyplast (Australia)	1985	Powder
	Porter Paint (US)	1987	Decorative/yacht
	Extensor (Sweden)	1987	Marine
	La Minerva (Italy)	1988	Powder
	Suministros (Spain)	1988	Powder
	Epiglass (New Zealand)	1988	Yacht/marine
PPG (US)	Cipisa (Spain)	1982	Motors
	IVI (Italy)	1984	Motors/refinishing/industrial
	Wulfing (W.Germany)	1984	Motors
	International (UK) -part	1985	Motors

SECTION III

FINANCIAL TIMES SURVEY

In Europe, the first big battleground for a new mass market for direct-to-home satellite television will be in Britain — but it is a fierce contest involving differing technical systems and standards, as Raymond Snoddy reports here.

A section of the Sky Television newsroom in London: part of a four-channel Sky service that began last month. Picture by Alan Harper

IN THIS SURVEY

THE BATTLE for the hearts, minds and eyes of the British public will start in the autumn. Success or failure for the new satellite TV channels depends on two factors: distribution and viewing levels.

The satellite channels will be distributed either by cable or directly by small dish aerials — but the laying of cable is both expensive and time-consuming. The direct-to-home dish market is therefore critical, and will initially be the main battleground. In April, the Financial Times will publish for the first time the findings of a new monthly FT Satellite Monitor. This will measure, month by month, the public's intention to spend money on installing dish aerials and the actual number of dishes in place. — *John Clemens reports on page 4*

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☐ *The Sky revolution, page 2.*
☐ *BSB relies on quality, page 4.*
☐ *Cable fights back, page 4.*
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SATELLITE BROADCASTING

Strong wills, deep pockets

THE LAUNCH of Astra, Europe's first medium-power television satellite in December last year was also the launch of a potential mass market industry — DTH (or direct-to-the-home) satellite television.

For more than five years, low-power telecommunications satellites have delivered new channels of television to cable networks and perhaps 100,000 homes across Western Europe, equipped with rather unwieldy dish antennas, usually larger than a metre in diameter.

The arrival of the 16-channel Astra, to be followed later this year by the scheduled arrival of even higher power television satellite services in Britain, France, West Germany and Scandinavia, creates — for the first time — the possibility of this important new mass market.

For viewers, there is the possibility of a great expansion of choice — and, in particular, the emergence of thematic channels, each dedicated to a particular type of programming — such as feature films, sport, news, pop music and arts programmes to supplement the schedules of the traditional broadcasters.

For consumer electronics manufacturers, retailers and renters, there is the hope that satellite television will turn out to be an important new product that will take over the mantle of the video recorder as it moves slowly towards saturation and replacement sales.

And because, in most cases, satellite television-receiving equipment has to be professionally-fitted if satellite TV takes off, there will also be a significant market in attaching the equipment at precisely the right angle to the walls and rooves of Europe.

"Satellite television is not just a passing fashion — it's a key technological change which will affect everyone for many year to come," predicts Mr Peter Groonenboom, managing director of Philips Consumer Electronics.

Although the world's first high-power DTH service in Japan has been quietly making progress for some time, *(see page six of this survey)*, there is general agreement that, certainly as far as Europe is concerned, the first big satellite television battleground will be in the UK.

Cable television has made slow progress so far in the UK, although the country has been swift in adopting previous new consumer electronics products, such as the home computer and the video recorder.

The main reason, however, is that two powerful media groups — Mr Rupert Murdoch's Sky Television; and British Satellite Broadcasting, a consortium including major companies such as the Bond Corporation of Australia, Granada, Pearson (publishers of the Financial Times) and Reed International, are lining up to do battle and are prepared to commit hundreds of millions of pounds to the attempt to establish satellite broadcasting in the UK.

On February 5, Sky switched on a four-channel service of general entertainment, sport, news and films, primarily aimed at the UK market, and plan to add The Disney Channel from August 1 and an arts channel by the autumn.

BSB launches its three channel service of films, sport and entertainment in the early autumn; with information and youth channels following in some form next year.

In the early years at least, it will be a fight to the death between Sky Television and BSB because the rivals are using satellites in different positions in the sky, incompatible transmission standards and different encryption standards for their subscription film services.

Indeed, across Europe there will be three different transmission standards and three different encryption standards — a factor that could seriously inhibit the development of the satellite television industry.

Until inexpensive motorised satellite receiving equipment — which can receive signals from all available television satellites — becomes common, the consumer will basically have to choose between Astra with its Sky channels and, in the English language, two channels from W.H. Smith Television and MTV Europe, and BSB.

Mr Ted Turner, chairman of the Turner Broadcasting System and the man who successfully launched the world's first 24-hours a day news station, warned last month that by launching two incompatible systems simultaneously, British satellite television was heading for disaster.

"It's crazy, absolutely insane. Both parties are going to be haemorrhaging red ink for a long time," Mr Turner told startled satellite operators at a Monto Carlo conference.

Despite the difficulties over conflicting standards, virtually all the big names of consumer electronics have either already introduced or are soon to prodnce receiving equipment for the DTH market.

An estimated 10,000 pieces a week are expected to arrive in the UK market throughout this month — a number that should double in April when Sky will launch its first big television advertising campaign. Amstrad Consumer Electronics alone is scheduled to be manufacturing receiving equipment at the rate of 3,000 a day by next month.

Sir Clive Sinclair, the electronics entrepreneur, will be launching his Cambridge Computer satellite receiving equipment in April at £169.96 for the basic model. And Mr Chris Curry, formally of Acorn Computers, has designed a system which will be sold direct to the consumer by a marketing company, International Television Systems.

Alba, the company that owns the old "Bush" brand name, plans to manufacture and sell at least 200,000 this year and already has trade orders for around 160,000. It also plans to introduce a television set with integrated satellite receiver microchips, later this year.

In addition, most of the big names ranging from Ferguson, Tatung and Salora to Grundig, NEC, Hitachi and Toshiba, are involved.

Sky Television is looking for more than 1m subscriber-homes in its first year, with BSB setting a more modest initial target of 400,000 subscribers by September, 1990.

Mr Graham Lawson, executive chairman of Megasat, a company that sold its first piece of satellite equipment in 1981, believes the market will break down into three segments.

The £199-£259 price range will be dominated by the multiple retailers.

In the £349-£379 range, rental will dominate. And with the motorised dishes in the £399-£600 range, satellite specialists will have the largest chunk of business.

But how many satellite receivers will actually be sold — and how quickly will the public switch on?

Logica, the consultants drawing on wide experience from other consumer electronics products, estimates that by the end of 1991, between 1.6m and 2.2m homes will be receiving satellite television — a forecast that, if proved to be true, will disappoint satellite operators. In addition, 45 per cent of that estimate will actually own a satellite television receiver. The rest will receive their pictures from cabla television networks and communal reception systems.

A number of market research studies in recent weeks suggest a modest market for satellite receivers in the short-term, considerable public ignorance about what is involved and a clear tendency to wait to see what develops.

Serious questions are also being asked about how the new channels will be financed. How much advertising revenue can they really attract in the forseeable future and how successful will snbscription film channels become, given the penetration of video, which according to some estimates already amounts to a £600m-a-year business in the UK alone?

The proliferation of various dishes and standards may also help to boost cable television.

One leading UK media-buyer, who asked not to be named, is quite emphatic abont Sky Television's attractiveness as an advertising medium at the moment — "below a 'universe' of 600,000 homes, it has to be questionable whether there is any significant price or value which can be attached to the service — and advertisers using the channel are probably engaging in an act of faith and support," the buyer says.

He estimates that if Sky Television's three advertising-financed channels took more than £10m — a fraction of their cost — in the first 12 months, it would be cause for celebration.

Mr Mark Booth, chief executive of the Maxwell Entertainment Group, believes that basic domestic channels will need to earn subscription income if they are to become profitable.

"Unless dish-penetration is extraordinary in the first 18 months, we believe domestic basic channels (as opposed to premium film channels) will be scrambled and sold as part of the pay-television package within two years," Mr Booth told the recent Financial Times Cable and Satellite conference.

Mr Booth does, however, believe that three to five satellite channels will be able to operate successfully across Europe — including MTV Europe, which his own company controls.

Support for Mr Booth's view comes from Mr Richard Branson, the chairman of Virgin, who jointly owns Snper Channel with Beta Television of Italy. Helped by the re-focussing of Sky Channel on the UK, Mr Branson believes Snper Channel could break-even this year.

But, as the satellite television revolution gets under way in earnest, the only reliable forecast that can reasonably be made is that those making the most optimistic assessments are likely to be disappointed — and that strong wills and deep pockets are going to be needed over the next few years.

Three further satellites will be launched over Europe this year

Olympus may carry the BBC's best

A DIRAMATIC increase in the number of satellite television channels available over Europe seems likely over the next few years, as plans accelerate for the launch of oew high-power television satellites capable of broadcasting direct to the home.

Apart from Astra and the French direct broadcasting satellite TDF-1, both already successfully launched, three further European satellites are scheduled for launch during this year alone.

One is the £400m experimental Olympus satellite being launched by the European Space Agency, with as many as 100 applications, from telecommunications to the scientific experiments now being considered.

One of the two television channels on Olympus will be used by RAI, the Italian national broadcaster, to transmit programmes in southern Europe; and the other is likely to be used by the BBC, to distribute a channel of the best of BBC and BBC-2, a service particularly aimed at Switzerland, Austria and Spain.

Mr Michael Checkland, director general of the BBC, says Olympus would give the BBC "an opportunity to demonstrate a range of our programming across Europe."

TV SAT 2, the West German DBS satellite that will replace the TV SAT 1 which never worked properly and had to be written off, will transmit four television channels.

Then, on August 10, British Satellite Broadcasting will follow with the first of two satellites, a system that will broadcast five channels of television aimed at the UK by next year.

But 1989, however dramatic, will be only the start of it.

SES, the Luxembourg company behind Astra, has already reached agreement to buy an existing US satellite that is surplus to requirements. Final details of the financial arrangements are still being worked ont, but if the deal is completed it will increase SES's channel capacity of 32 channels by the autumn of 1990.

The plan would be to co-locate the two sister-satellites in the same orbital position, so

This year, however dramatic, will be only the start

that all 32 channels could be picked up on a single receiver.

"Our company's impending decision to acquire a back-up satellite shows further commitment by Astra's backers to the programmers' need for security in their broadcast distribution service across a devaloping market," Mr Pierre Meyrat, director general of SES, said in London recently.

In fact, modern satellites, if they are launched successfully, are becoming so reliable that the extra 16 transponders on the second satellite will almost certainly be used to offer new programming.

Astra, however, will have considerable competition from the European Telecommunications Satellite Organisation (Eutelsat), the intergovernmental organisation whose shareholders are the post and telecommunications organisations of the western European nations.

Entelsat has recently ordered the fifth of a new generation of satellites designed with television transmission in mind, although the series will also provide capacity for everything from telecommunications to remote printing, video conferencing and digital radio.

Each satellite will have 16 transponders. The first satellite will be launched in the spring of 1990, and another will be launched every six to eight months thereafter.

Eutelsat says that 50 transponders, each capable of broadcasting a television channel, are already firmly committed for long lease periods backed up by non-returnable deposits.

"This, of course, is bad news for our would-be competitors. The market has natural limitations, and all this capacity will be there ready and in place. I am not sure what business will be left over to support new entrants into the market," Mr David Hardman, Eutelsat's director of administration and finance, argues.

Eutelsat is also beginning to plan for a third generation of satellites, which could be a Europe-wide substitute for the current generation of DBS satellites, although no decisions have yet been taken.

Raymond Snoddy

Raymond Snoddy considers the Sky revolution and what happens next

Stern tests for Mr Murdoch's nerve

THE INITIAL audience may have been tiny but when Mr Rupert Murdoch, chief executive of News Corporation, switched on four channels of Sky Television on the Astra satellite last month it could with some justice be described as an historic moment for British television.

In less than eight months Sky Television had, at least in theory, managed to double the number of channels viewers living outside the small number of cable television areas in the UK could receive. At the time there was much talk of a revolution and the dawning of "television's new age".

By the autumn there will be nine English language channels on the 16-channel Astra satellite quite apart from the three channels being launched by Sky rivals British Satellite Broadcasting.

Already Mr Murdoch is offering, in addition to the pioneering Sky Channel which was launched in 1982, Sky News, Europe's first dedicated 24-hours a day news channel, Eurosport, a joint venture with a group of Europe's public service broadcasters in which Mr Murdoch puts up the money and the broadcasters made available their rights to major sporting events, and Sky Movies.

In the autumn, in a joint venture with the Disney organisation, Sky Television will be offering a £12-a-month subscription package to viewers consisting of Sky Movies and the Disney Channel from the US. Around the same time Sky will launch a separate arts channels funded largely, it is hoped by major industrial sponsors. At the moment Sky Channel carries arts programmes from the existing Arts Channel, in which United Cable is the main investor, late at night.

Eurosport and Sky Arts are both seen as pan-European channels on the grounds that music, unaided, and sport, with the help of multi-language commentaries, can cross linguistic and cultural barriers in the way that few other kinds of programmes can.

Both Sky Channel itself and Sky News will be mainly aimed at the UK market. In the case of the subscription channels heavily based on films Sky Television has only acquired the rights for the UK and Ireland.

Mr Murdoch's great media rival Mr Robert Maxwell, publisher of Mirror Group Newspapers, has also transferred MTV (Europe), the pop music channel in which be has a majority stake, from a low power telecommunications satellite to Astra. MTV is an advertising based channel.

The other major player so far on Astra, apart from Scansat, broadcasting two channels of television to Scandinavia, and Filmnet, a Belgian-based film channel, is W H Smith Television.

The retail and newspaper distribution company sees television as one of its growth areas for the future and its two existing channels Screensport and Lifestyle, the only European television channel aimed specifically at women, are already available in 1.8m homes across Europe on Intelsat V, a low power telecommunications satellite.

The move to Astra will make W H Smith channels available direct to home across Europe.

Screensport, which has lodged formal complaints with the European Commission against the Eurosport joint venture on anti-competition, is already available with German and French sound tracks as well as English. There are also plans for a Spanish version through an affiliated company in Spain along the lines of existing ventures with TV Sport in France and Sportkanal in Germany.

W H Smith is also likely to add five hours a day of programmes from The Children's Channel, the channel owned by British Telecom, DC Thomson, Central Television and Thames Television, to complement Lifestyle programmes.

The achievement of Sky Television, particularly in putting together a 24-hours a day news channel of perfectly respectable quality in a matter of months has got to be acknowledged. There have also been innovative current affairs ideas – as least as far as Britain is concerned – such as asking Mr Norman Tebbit, the former Conservative Cabinet minister and Mr Austin Mitchell, the Labour MP, to jointly interview political figures.

From the beginning of April BBC broadcaster John Stapleton will present a new half hour news programme Newsline three times a week.

However great the achievement in getting Sky Television on air on the appointed day the company still faces enormous problems in building an audience large enough for advertisers to find attractive, and convincing a significant section of that audience to pay £12 a month for Sky Movies and the Disney Channel, on top of the cost of the receiving equipment.

Mr Murdoch has a long history of supporting loss-making ventures he believes in over the long-term. He will probably need all his legendary nerves of steel to cope with the cumulative losses at Sky which could easily run to several hundred million pounds before there is any sign of break-even.

Sky News alone is likely to cost more than £30m a year and is equally likely to attract only a tiny advertising revenue

There will soon be nine English-language channels on Astra

in its early days until the audience grows.

Mr Murdoch has already suggested that if neither audience nor advertising revenues grow at the expected rate, then all four Sky channels could become subscription channels although the additional charge might only be a further £1 a month.

For Sky Television the first real test will come by late spring. At the moment the lack of satellite receivers, particularly those being produced by Mr Alan Sugar's Amstrad Consumer Electronics means that demand far outstrips supply.

By April Amstrad's production will rise from more than 1,000 a day in recent weeks to something like 3,000 a day. Dixons, the retail group is committed to stocking 500,000 Amstrad receivers in the first year alone.

As well as Amstrad about a dozen consumer electronics companies are producing receiving equipment for the Astra satellite.

The key questions for Sky now is how well demand will hold up when there is a proper supply of aerials and receivers in the shops and the extent to which Mr Murdoch can take advantage of the period between now and September when BSB launches its rival channels.

Alan Harper

Mr Rupert Murdoch, chief executive of News International (right), with Mr Andrew Neil, executive chairman of Sky TV

SKY TV'S MEDIA BUYING ESTIMATES (£m)

Total potential audience	ASSUMED AUDIENCE SHARE One per cent	Two per cent	Three per cent
600,000	14	28	42
900,000	21	42	63
1,200,000	28	56	84

The campaign to persuade Britain to join the satellite revolution will start in September

BSB relies on quality backed by technology

PRELIMINARY skirmishes between British Satellite Broadcasting and Mr Rupert Murdoch's Sky Television have already broken out in the columns of the national press.

The first shots in a television advertising and marketing battle, which could ultimately cost both sides a total of £50m, have been fired.

In September, when BSB launches its three channels of television, the campaign to persuade the British public to join the satellite revolution will begin in earnest – the battle of the few against the many, for by then there will probably be nine English-language channels being transmitted by the Astra satellite.

BSB – whose major shareholders include Mr Alan Bond's Bond Corporation of Australia; Granada; Pearson, the publishing and industrial group that owns the Financial Times; and Reed International – is relying on what it believes will be higher quality programmes, higher quality pictures and more sophisticated technology.

Mr Anthony Simonds-Gooding, chief executive of BSB, argued recently: "It is becoming increasingly clear that the business and programming approaches of ourselves and Sky are fundamentally different. Although there may be room for both, we cannot both be right."

BSB's programme plans have changed during the past three months, following the Government decision to bring forward plans to advertise Britain's last two remaining high-power DBS channels, allocated to Britain under international agreement.

BSB's first three channels will now offer general entertainment, including programmes aimed specifically at women and children, films (free during the afternoon, by subscription in the evening) and sport.

The satellite company has also applied to the Independent Broadcasting Authority for the two further channels which

'Our approaches are fundamentally different'

would start transmitting next year. BSB wants to add channels for news and information, and for youth and music.

If BSB is successful, Crown Communications – the fast-growing media company which controls LBC, the London commercial radio station – would, with partners, put together the information channel which might include parliamentary broadcasting.

Mr Richard Branson's Virgin Group, a founder shareholder which has since pulled out and sold its stake to Mr Bond, is keen to provide tha programmes for the youth-and-music channel.

Even if BSB fails to win the extra two channels – and six competing groups have expressed interest in either one or two channels – the consortium will have an important say in what is eventually carried. Not only will BSB own the satellite that carries the additional channels, but the IBA has ruled that, whatever happens, Britain's DBS service should offer complementary channels.

Once BSB gets going, the fiercest commercial battle with Mr Murdoch with be over their rival film channels. The competition last summer led to a virtual auction for UK pay-television rights, which must have given profound satisfaction to the Hollywood studios.

In the end, BSB concluded deals with five of the seven Hollywood majors – although Warners did separate deals with both sides – and is claiming victory, with rights to more than 2,000 films, ranging from *Fatal Attraction* and *Crocodile Dundee II* to *A Fish Called Wanda* and many films as yet unmade.

BSB says that, apart from money, a key element in the equation was the confidence the Hollywood studios had in its Eurocypher conditional-access system, to prevent pirating of movies such as has happened widely in the US.

However, more than $700m was committed to the acquisition of pay-TV rights, and in some cases also broadcast rights which will be sold on. The satellite company claims the deals were completed within its film-purchasing budget, but the insistence by the studios of down-payments and guarantees backed by cash meant that BSB had to bring forward part of its fund-raising.

In January the company announced that shareholders had increased their commitment by £131m, making a grand total raised or committed so far of £353.5m.

The importance of the film subscription service to BSB's finances in the early years was made clear by Mr Simonds-Gooding last month. A subscription of less than £10 a month would generate gross revenue of £120m a year for every 1m homes signed up.

"All this is foregone if one does not have an effective conditional-access system," the BSB chief executive argues.

Apart from getting on air, the next big challenge facing BSB will be the planned public flotation in the autumn, if market circumstances allow, to raise the rest of the necessary finance – probably an additional £400m.

Five months before the launch of the McDonnell Douglas Delta rocket that will carry the first of BSB's two satellites into orbit, BSB says everything is on schedule, including the manufacture of the Hughes satellite.

Last month, the whole BSB concept was given an important boost, when Philips, the Dutch multi-national consumer electronics company, agreed to supply up to 1m set-top receivers – the black boxes that convert the satellite signal for television use. Philips was joining three other manufacturers, chosen after a competition: Ferguson, the subsidiary of Thomson of France; Salora, owned by Nokia of Finland; and Tatung UK, the subsidiary of the Taiwanese consumer electronics company.

Much more important than BSB's obtaining another equipment supplier was the tacit endorsement of the BSB approach, and in particular the choice of the D-MAC standard.

Mr Peter Groonenboom, managing director of the Philips consumer electronics division, made it clear he believed MAC was an important and necessary step on the road to high-definition television (HDTV) and wider, sharper pictures.

The next big challenge will be the planned public flotation

Although BSB claimed everything was on schedule at the beginning of this month – when the first television advertisements appeared, featuring its flat aerial (the Squarial) and the slogan, "Its smart to be square" – it has yet to sign a main production agreement with Mr John Collins' tiny company Fortel, which has been developing the Squarial.

The shortage of receiving equipment for Sky Television at the launch of its programme service has, however, provided an unexpected boost for BSB. It seems unlikely that Sky will be able to achieve a runaway victory in the months between now and the BSB launch.

Mr Simonds-Gooding believes that little of significance is going to happen in terms of satellite receiver sales before this year's pre-Christmas market.

Assuming that BSB secures the necessary funding in the autumn, there seems little doubt that 1990 will bring one of the most dramatic commercial battles even seen in the UK, with hundreds of millions of pounds at stake.

Raymond Snoddy

Mr Anthony Simonds-Gooding: 'We can't both be right'

Della Bradshaw on BSB's expensive efforts to corner the market

Britain set to become the testing ground for Europe

TODAY BRITISH Satellite Broadcasting (BSB), which will launch its satellite television service to the UK in the autumn, will begin a national roadshow to try and persuade consumers that they should get their satellite television services from BSB.

The move follows hard on the heels of a multi-million pound advertising campaign from BSB which, in the eye of the consumer, brought it into direct competition with Sky Television. Mr Rupert Murdoch's Sky Television began broadcasting programmes to homes in the UK and Ireland in February from the Astra satellite.

As the battle hots up in the UK, it looks set to become the testing ground for Europe, with broadcasters there waiting to see who the winners and losers will be.

With the recent announcement from Luxembourg-based SES that it is launching a second Astra satellite, the whole of Western Europe can expect to have access to at least 32 channels of satellite television by 1990.

The focus of the fight will be the programmes on offer and the receiving equipment available to receive the transmissions. As today's television sets are not equipped to receive satellite television signals, satellite dishes and extra boxes of electronics are needed to pick up and interpret them. As different transmission signals will be used by Sky and BSB to beam the programmes down, consumers will have to buy two types of satellite receiver dish and associated electronics in order to receive all the programmes.

Up to six months ago the race looked simple. Sky Television planned to get into the market early and drench consumers with comparatively cheap equipment, based on the older Pal television signal standard, and using the familiar 60 cm round receiving dish. BSB, in which Pearson, owners of the Financial Times, has a stake, would not launch its service until at least six months after Sky. But it would have more sophisticated equipment, based on the digital Mac standard, and use a smaller (25 cm) dish in a revolutionary square shape.

The question was, would Sky, with its four channels and early availability, so dominate the market that BSB would not be able to survive?

However, the situation has now become more confused. To begin with, the take-up of the Sky service has been limited by the amount of equipment that is available. Although more than 20 manufacturers, including NEC, Hitachi, Toshiba, Philips, Bush and Sinclair Research, are committed to supply equipment to receive Sky pictures, only a few, such as Amstrad, Grundig and ITT Nokia, are actually supplying equipment.

The delay has had two major causes. First, a number of manufacturers held back on investment in their production lines until the Astra satellite was safely in orbit in December.

More significant have been changes in the specification for the equipment. This happened when Sky, under pressure from film-makers in the US, admitted in October last year that it would have to charge for its film channel from July – the company had previously planned to offer all its channels free of charge.

So, four months before the launch of the service manufacturers had to re-specify their

Sky's take-up has been limited by the availability of equipment

equipment to incorporate encryption techniques, so that the pictures could be scrambled, and only authorised viewers could receive the programmes.

BSB will encrypt all its three channels, but will only charge viewers for one of them.

Sky says it is unable to give figures for the number of homes already receiving its programmes, but says that some 10,000 dishes will be sold this month. In addition, many of the UK's cable television viewers are fed the satellite programmes via their cable networks.

Delays in getting Sky off the ground could be a welcome boost to BSB, if it can take advantage of the situation. But although it now has four manufacturers signed up to make the electronics equipment – Ferguson, Philips, Salora and Tatung – it could be hit by delays in production of its "Squarial" receiving dish.

Mr David Eglise, director of technical services at BSB, says he is confident there will be ample equipment when BSB launches it services. He is also confident that the revolutionary Squarials will work to specification even though only metal ones have been demonstrated so far, not the injection-moulded plastic ones on which BSB has based its £20m advertising campaign.

But even before the Squarial hits the high streets, rival dishes could be launched to steal the limelight. Sinclair Research, of Cambridge, for example, is demonstrating its Sky receiving equipment later this week. Its dish is also square, and is made of styrene backed by a compound of glass fibre and plastic. (However, it is still the large traditional dish needed to pick up the television signals from the low-powered Astra satellite.)

The atmosphere of confusion pervading the consumer sector over the various merits of the two systems has been good news for the rental sector. As with the confusion that occured when different format video recorders were introduced in the UK, the wary consumer is waiting to see which one eventually dominates the market.

Mr David Holtom, general manager for corporate development at Radio Rentals, believes the confusion will continue. "Because of the uncertainty of the marketplace and the confusion over the two systems, people are coming in to ask our advice. There is certainly the suggestion that it will continue for some time."

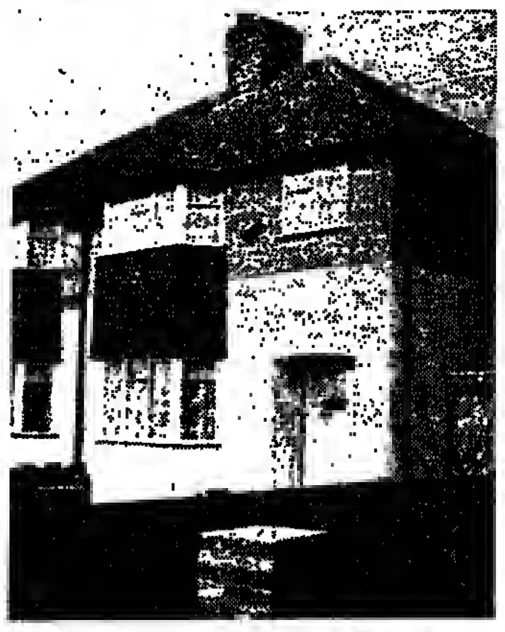
Whether the UK public will actually take to satellite televi-

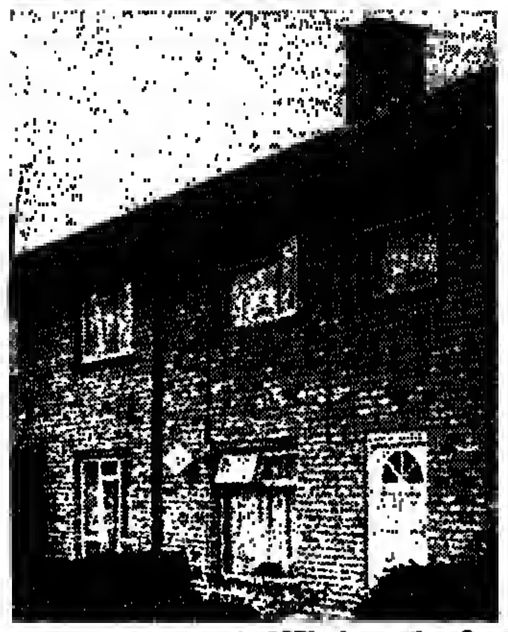
BSB could be hit by delays in production of its Squarial receiving dish

sion, and if so just which system will dominate, remains to be seen. Market projections for satellite receiving equipment vary widely, from optimists who predict that 40 per cent of the UK's 21m households will be watching satellite television in the mid-1990s to more gloomy forecasters who predict it will take up to 2000 to persuade 750,000 households to receive satellite transmissions.

In Europe, consumers, particularly in West Germany and France, are likely to face a similar, if not worse, situation to those in the UK. The authorities in those two countries have standardised on a third transmission standard, a version of Mac which uses a narrower bandwidth, so it is easier to feed down cable TV networks.

France has already launched its first broadcast satellite, TDF-1, and plans to launch a second in 1990. The German Post and Research Ministries will launch their TV SAT-2 in the middle of this year. And from 1990 onwards Eutelsat, which is financed by the European post and telecommunications authorities, is planning to launch four more satellites. All of which will be in addition to SES, which will have the capacity to broadcast 32 channels all over Western Europe by 1990.






Houses installed with BSB's innovative Squarial dish and, bottom right, the actual square shaped unit which measures 25 cm, much smaller than the rival Sky dish

FT to monitor monthly sales and installations of dishes

Stormy autumn conflict

ON FEBRUARY 6 this year about 70,000 homes in Britain could view the new Sky Television channels: about one in every 300. These households, mainly in Aberdeen, Coventry, Croydon, Glasgow and Windsor, were those who now subscribe to the new multi-channel broadband cable systems available in a few parts of the UK. They are also likely to be those viewing Sky's partners on the Astra satellite – the MTV, Screensport and Lifestyle channels – and will soon be the first homes to see the three new channels dues from BSB.

The great television war has not yet begun in earnest: the big battle for the hearts, minds and eyes of the British public will break out in the autumn of 1989. Then BSB and Sky will (assuming, of course, a successful BSB satellite launch in the autumn) really engage forces; the second front may well be a fierce programming counter-offensive from the BBC and ITV.

What will determine the outcome? Success or failure for the new satellite channels depends on two factors: distribution and viewing levels. These will determine their advertising and subscription revenues and hence their financial viability.

The satellite channels will be distributed either by cable or directly by small dish aerials. Today distribution is still mainly available by cable and currently 1.7m home are passed by cable, of whom about 275,000 pay for additional television channels. Most of these cable systems have, however, limited channel capacity and will not be able to distribute all the channels becoming available. Fewer than 500,000 homes are passed by the new multi-channel broadband systems and it is these that will initially

■ IN APRIL the Financial Times will publish for the first time the findings of a new monthly FT Satellite Monitor. This will measure, month by month, the public's intention to spend money on installing dish aerials and the actual number of dishes in place.

The survey, based on more than 4,000 home interviews in February and March, indicated that just 3 per cent of households (about 500,000) say they definitely intend to instal a dish though another 15 per cent (about 3m) say they may enter the market. But who can say now what the figures will be like in the autumn, as the promotional battles rage in the run-up to Christmas?

During the coming months the FT Monitor, conducted by Kensington Research with interviewing by Audience Selection, will check, week by week, the public's interest in satellite television and its dish-buying behaviour: how many homes intend to buy a dish, and how many are actually installing them.

be able to make available all the new channels.

Broadband cable does, nevertheless, look set to expand. Franchises already awarded by the Cable Authority could, if completed, eventually exceed 4m homes and the increasing scale of US finance available to cable makes this look more likely than was once the case.

To these can be added new franchises currently being awarded by the authority, which could add a further 3m homes. This means there is the potential for 7m or more homes to have broadband cable available over the next five years – one in four of all homes in Britain.

But the laying of cable is expensive and time-consuming. It is therefore unlikely that cable will be available over the next two or three years to more than 2m homes and, even if one in four choose to subscribe (a much higher figure than now), this will only give the new satellite channels access to about 500,000 homes – not enough to provide the advertising and subscription revenues they need.

The direct-to-home dish market is therefore critical to success, and will initially be the main battleground. Once distribution is established, satellite revenues depend on the willingness of dish-buyers to pay for subscriptions to the non-advertising film channels and to view the advertising-supported free channels.

The evidence from the existing 70,000 broadband cable homes (who receive on average 15 channels) is that the satellite channels can take about 40 per cent of all viewing away from BBC and ITV, and that subscribers choose to take a film channel. So it seems reasonable to expect that, in dish homes, at least a third of all viewing will be to the new channels, and that more than half of these households buying a dish will choose to pay the extra £10 to £12 monthly to get the film channel.

But the critical factor for revenue is how many homes instal a dish, and how soon. For Sky and BSB, the other critical factor is which dish – Astra or BSB?

John Clemens

CABLE TELEVISION

Creeping up on the rails

SATELLITE may have attracted most of the publicity in recent months, but cable television, the industry that appeared to have died in the UK before it was even established, is showing remarkable signs of life and renewed investment interest.

"Amid all the clamour about satellite, cable has been steadily creeping up on the rails," Mr Jon Davey, director general of the Cable Authority, the industry regulatory body, said recently.

Since Mr Kenneth Baker, then minister for information technology, unwisely oversold the dream of a cable revolution and talked in 1982-83 of wired cities of the future, the actual achievements of cable have been modest.

Only 11 of the new franchises are operational – some of them in a small way – and at the end of last year only 442,000 homes were actually passed by cable and therefore capable of receiving the service. The present number of subscribers, around 62,000, means that only 14.7 per cent of those who could have cable have actually decided to do so.

Yet, apparently unaffected by the prospect of competition from television satellites and direct-to-the-home receivers, there has been a dramatic increase in applications for cable franchises.

The real boom for cable began last year, when no fewer than 20 new franchises were advertised – and the Cable Authority advertises franchises only when it has had serious expressions of interest in cabling a particular area. Six new franchises have already been advertised this year, and the authority says many more propositions are being considered.

"With the interest currently being expressed to us, we sometimes wonder how much of of the country will remain unfranchised in a year's time," says Mr Davey; although some of the large franchises, such as Birmingham and Solihull, could take up to eight years to complete.

Including franchises that will be advertised this year, the Cable Authority estimates that 6.5m homes could be passed by cable by 1992, and 10m by the end of 1995. On more optimistic, but still realistic, assumptions, the number of homes passed could reach 8m by the end of 1992, 11m by 1993, 13m by 1994.

A number of important factors seem to be going cable's way, several of them fortunate coincidences.

There is the increase in quality and quantity of programme channels on offer to cable subscribers. Both Mr Rupert Murdoch and British Satellite Broadcasting will each be spending more than £100m a year on programmes, and will soon be transmitting a total of 10 new channels.

The lack of agreement on transmission standards between the two satellite rivals, and the fact that two aerials will be needed for the foreseeable future to receive both services is another potential boon for cable. A cable operator will be able to feed all available signals into a cabled home without a proliferation of aerials and black boxes on top of television sets.

Some potential investors in cable are also showing increasing interest in providing telephone services, following a better-than-expected response to a pioneering scheme run by

The transmission control room at Swindon Cable, Hawksworth, Swindon

Windsor Television, one of the first and most successful of the modern cable operators.

But the biggest boost so far is coming from North American cable companies and investment institutions looking seriously to see whether the US cable success story can be replicated in the UK.

The big North American players include Pacific Telesis, the US phone company; Maclean Hunter, the Canadian publisher and cable operator; Videotron, one of Canada's largest cable operators; Payne Webber, the US financial group; and United Cable, whose interests include American cable channels such as Discovery, as well as being one of the top 10 cable operators.

The US cable industry had total revenues last year of $13bn, and more than half of American homes are subscribers.

Despite the new mood of confidence in the industry,

There has been a dramatic increase in applications for cable franchises

cable is facing two serious problems. One is the extra competition that satellite television will provide. The other, potentially more serious, is government proposals in the white paper on broadcasting, which many in the industry fear could stop the growth in its tracks.

The cable industry has argued strongly that cable and satellite are complementary, and that on the whole cable will benefit from the Murdoch/BSB battle in space.

Mr Adam Singer, president of United Programming, warned at the recent FT Cable and Satellite conference that this was not necessarily so. It was rare to find three different technologies – cable, satellite and video – all competing by providing entertainment to a television set.

In Croydon, United Cable had a penetration among subscribers to homes passed of about 20 per cent – above the national average.

"If cable and DBT satellite had started out at the same time, do you believe that cable would have achieved this level of penetration?" Mr Singer asked.

Cable may still eventually come good. But what happens to cable as an investment if, for every subscriber, there is an equal and opposite dish-owner? the United executive asked.

"Cable may still eventually come good, but certainly break-even gets put back, the losses become greater and cable ceases to be founded on arithmetic and becomes a religion," Mr Singer argued.

The largest threat to the further investment prospects for cable in the UK is coming from the Government, and in particular the proposal that, in future, there should be a separation between the network owner and the sale of the programme service to the consumer. The selling job would be carried out by a new breed of cable retailer.

In addition, the Government is proposing that cable franchises should be awarded by competitive tender, and that there should be a levy on profits when there is no cable competition in a franchise area.

In a study for Pacific Telecis' holding company PacTel, consultants Booz Allen & Hamilton says: "Any of these proposals individually, and particularly when taken together, will lead to a climate in which the benefits of increased choice will not reach British consumers."

Government proposals could push the break-even point for cable towards the end of a 15-year cable franchise, because of increased costs of debt and decreased revenue, and have a "devasting" effect on the rate of return.

The Office of Telecommunications (Oftel), the telecommunications watchdog, has also been critical of government plans, and argued that they could severely damage Oftel's policy of encouraging competition to British Telecom at the local level.

Government policy seems to have sprung from a combination of ideological attachment to splitting up integrated industries to promote internal competition and a desire to avoid the British cable industry's developing into a powerful monopoly of the sort seen in the US.

Critics say that the Government is trying to impose conditions appropriate to a mature industry on one still at a fragile stage in its development. Mr Singer puts the argument more bluntly: the Government has "decided to poke cable's eyes out with a vertically separated stick."

Despite the anxiety about the Government's planned legislation for cable, the reality is that it may have a limited effect, at least for the foreseeable future.

Cable operators have the right to apply for, and get, 15-year-old franchises under existing legislation until the Cable Authority is formally abolished sometime next year.

All the signs are that many intend to avail themselves of the opportunity.

Raymond Snoddy

Philip Rawstorne on a fight for viewers which will leave at least one big casualty

A screen battle to the finish

AS THE opening salvos have shown, the marketing battle between Sky Television and British Satellite Broadcasting (BSB) for British television viewers, subscribers, and advertisers is going to be fiercely fought. Each believes there will be only one survivor.

Both will also have to contend with the established ITV companies, Channel 4, and the BBC, for shares of an audience which, most observers agree, is unlikely to expand just because more channels are available.

Sky's launch last month, and the publicity given to it in the Murdoch newspapers – even the Page 3 girl in the Sun was clasping a satellite dish – should have given it an advantage over BSB which will not be on air until September.

But any advantage Sky gained from the successful, simultaneous launch of four channels, appears to have been reduced by public confusion over the technical merits of the different broadcasting systems adopted by Sky and BSB, and by difficulties in obtaining the Sky aerial.

Much of the confusion arose from Sky's early advertising which concentrated largely on claims that its PAL transmission system is more compatible with British television sets than BSB's DMAC system. DMAC gives a better picture and is easier to encrypt (a process that ensures only subscribers can receive pictures), but viewers only get the full benefits with new, high-tech screens.

BSB complained to the Office of Fair Trading that the advertising implied that viewers would have to buy new television sets and video-recorders for BSB's broadcasts. The OFT rejected BSB's complaint but referred it to the Advertising Standards Authority which censured Sky, saying that in six cases, advertisements questioning the quality of BSB's reception dish – the Squarial – could be "capable of misleading".

BSB has since gone on to commission a Manchester University study of the coverage of satellite broadcasting by the Murdoch newspapers which, it claims, are running a sustained campaign of misinformation.

A complaint from Sky about BSB advertising has since been rejected by the ASA which appealed to both companies to have "due consideration" for the consumer in their argument over new technology.

The confusion engendered by this controversy appears to have worked in BSB's favour, according to Mr Michael Savage, analyst for stockbrokers, Sheppards, by persuading most people to wait for the launch of BSB in the autumn before buying receiving equipment.

Sky claims that orders for its dishes are running at "a very high level". But there has been a frustrating delay in supplies to the shops – caused partly by Mr Murdoch's decision to make his movie channel a subscription one – and BSB has stepped in to announce that it will be giving away 3m "Squarial" vouchers, worth £50 each, redeemable against the purchase of its receiver equipment.

That offer would cover just about all households thinking of installing dishes. According to an Audience Selection survey last month just 3 per cent, about 500,000, said they would definitely buy, and a further 12 per cent, 2.5m, said they would probably instal them. Attitudes may change later, but capturing the major share of this initially limited market will be crucial.

(BSB's legal status as a national broadcaster would appear to give it advantages over Sky in gaining access to cable and relay networks, though the Home Office is reviewing the situation; Mr Francis Baron, of W H Smith Television, with two channels alongside Sky's on the Astra satellite, says that, in any case, relay systems are "not a pot of gold.")

"It really comes down to the early viewing attraction of the movie channels"

BSB and Sky, therefore, are each spending some £20m this year on national advertising campaigns – much of it on TV after a sharp tussle with some reluctant ITV companies.

BSB, which plans to spend some £60m on advertising and marketing over the next two years, has hired Bartle Bogle Hegarty, the agency famous for its work for Levi Strauss and Audi, to create its advertising. It launched its preliminary "It's smart to be Square" campaign this month. It includes commercials on radio featuring well-known television personalities.

Four commercials will be run on television dealing with programming, parental control, digital stereo sound, and the films to be offered on the movie channel. A national poster campaign is planned in support.

Mr Anthony Simonds-Gooding, BSB's chief executive, says: "The campaign will have a very positive tone and message about the attractions which BSB will be offering to British viewers across the widest possible spectrum of interests ... we want viewers to be able to make an informed choice."

After the preliminaries to its launch, and the extensive publicity given to the event itself, Sky has deferred its next major burst of television advertising.

But posters by its agency, Lowe Howard-Spink and Bell, whose clients include Hanson Trust, Whitbread and Vauxhall, have been appearing across London, proclaiming: "You'll never say there's nothing on the box again"

Advertisements have also been placed in consumer and trade magazines and sales of its aerials are being heavily promoted in retail outlets.

In the end, however, it will be the quality of the product itself which determines success or failure. Some of the Sky programmes are there to be seen – though as yet, they have not won much critical applause. And those with Astra receivers can also take the two W H Smith Lifestyle and Sport channels. BSB's are still only a promise.

Each is vying to outdo the other in offering news and current affairs, arts, music, sport and personalities.

According to the Sheppards' analysis, "it really comes down to the early viewing attraction of the movie channels." However, the growing corner-shop video industry may take some of the appeal from them.

Mr Murdoch has his 20th Century Fox library to draw on, and has also done deals with Orion, Warners and Lorimar for future films.

BSB has paid heavily – £170m to Paramount and MCA Universal, £76m to Columbia, £50m to MGM/United Artists – to acquire rights to some 1,100 films and plans to transmit them in the early 1990s on wide screen television.

Sheppards gives the edge to BSB on that score – but there is a lot of counting yet to be done.

Total audience shares in broadband homes

	Adults (%)	Children 2-15(%)
BBC 1/BBC 2	27.1	20.2
ITV/Channel 4	36.1	27.2
Premiere/HVC/Bravo	19.9	10.4
Sky Channel	7.9	22.0
MTV/Lifestyle	6.4	5.1
Super Channel	-	-
Screensport	-	-
Children's Channel	1.4	15.1
Other Channels	1.2	-

Source: 1988 AGB Cable Monitor

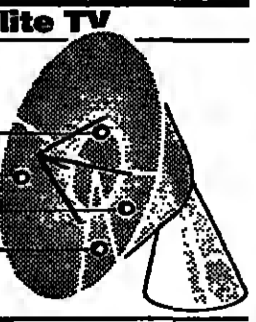
THE DISH MARKET: VIEWER INTENTIONS

Number of TV households

	Percentage	'000
Definitely will buy	3	547
Probably will buy	12	2,465
Will not buy	78	16,343
Receive cable TV	1	273
Own satellite TV	-	-
Don't know	6	1,341

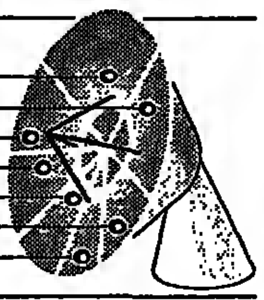
Source: Audience Selection, February 1989

Perceived value of satellite TV

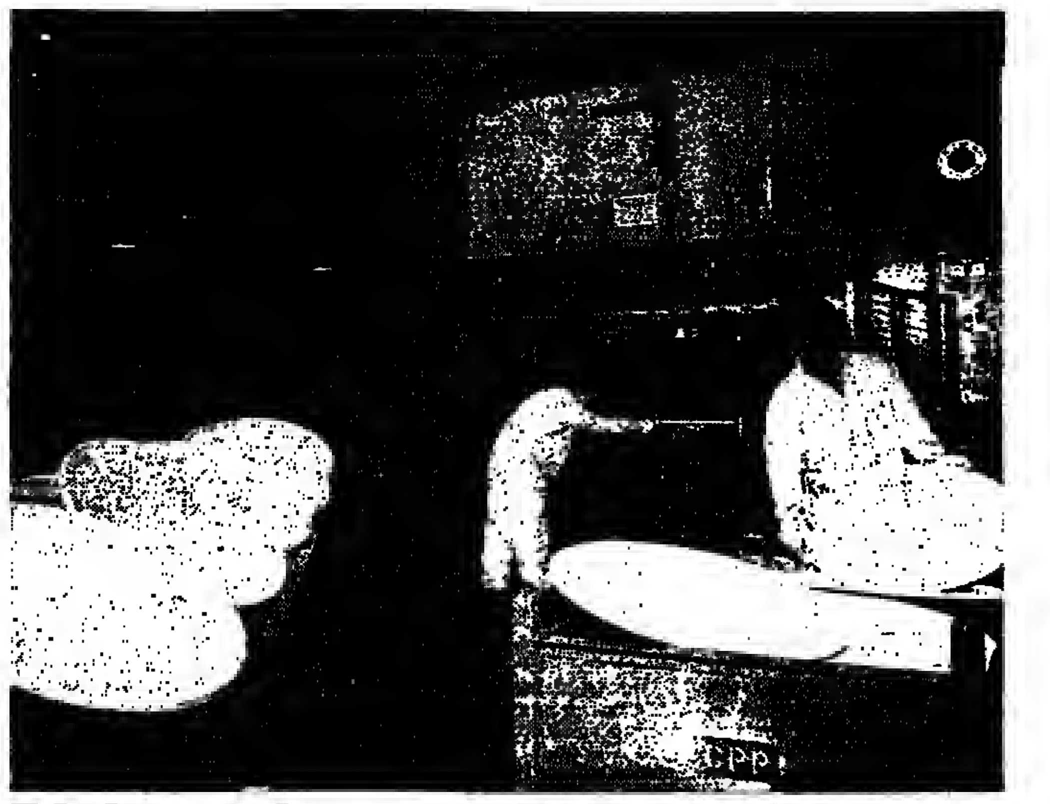


Source: Media Audits Satellite

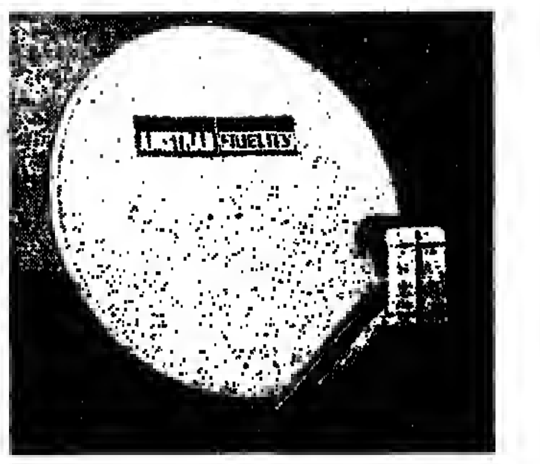
UK channel preference



Source: Media Audits Satellite



Dish to please a popular palate



■ Satellite dishes being manufactured (above) and the UK manufactured Amstrad Fidelity satellite dish (right). The company is planning for production of 100,000 units a month. Key components will be sourced from the East East. The units priced at under £200 will be aimed at the mass market. At the launch earlier this year, Amstrad chairman, Mr Alan Sugar, said although the company's entry into satellite television would be through the dish and receiver sector, it was also well placed to produce television sets with built-in receivers.

ADVERTISING

Healthy long-term outlook

FEW OF Britain's advertisers believe that satellite television will have a significant impact on their operations in the immediate future.

A recent survey by the advertising consultancy, Media Audits, of 75 companies which will together spend some £450m on television advertising this year, found that less than 25 per cent would be buying satellite airtime. On average, they would be allocating only 2 per cent of their budgets to the new medium.

Just over half of the companies were undecided about advertising on satellite; the remaining quarter said they had no intention of doing so. Sky claims to have 100 advertisers but admits they are not yet spending much money.

These figures are not surprising when, on the basis of most forecasts, Sky and the yet-to-be-launched BSB, will do well to reach a total of 1m homes during the next year, including the 300,000 already on cable.

Advertisers have been clamouring for more television outlets. But not until satellite begins to deliver much bigger audiences – or important consumer segments – will advertisers consider diverting much more of their budgets to it, though some will be attracted by discounts of 25 per cent and more on ITV's rates, and the possibility that supporting the new broadcasters now may earn preferential treatment later.

Advertisers have been clamouring for more television outlets

Both Sky and BSB are naturally optimistic about their viewing prospects. BSB aims to reach 3m households in the first two years, and believes there is a long-term potential market of 13m households.

But Mr John Clemens, of market researchers AGB International, predicts the growth in satellite viewing will be a slow process.

A survey of 2,000 households throughout the UK last month suggested that 78 per cent had no intention of buying dish aerials. Only 15 per cent – equivalent to 3m households – said they would definitely, or probably, buy them. Mr Clemens predicts 600,000 homes will be receiving satellite channels direct by March next year; 1.2m by March 1991; and 2.6m by 1992. But even this rate of growth is highly dependent on the prices charged for the dishes and the subscription channels.

Conservative projections of the expansion of cable suggest that by 1993, there may be some 1.2m additional households receiving satellite broadcasts by that means.

By the mid-1990s, therefore, it seems unlikely that more than one in four UK homes will be receiving satellite channels. But by that time, the new Channel 5, with 70 per cent coverage of the population, will be broadcasting; Channel 4 may be offering advertisers more opportunities; and the ITV companies are likely to have improved their competitive position.

At the moment, the Media Audits survey suggests, advertisers see these developments as more promising than satellite.

The share of the viewing audience – now virtually static – that satellite is likely to secure in the homes where its programmes are available then becomes the important question.

Mr Clemens says the best evidence on prospective audience levels comes from what is actually happening now in households with cable. This shows that the satellite channels (with weaker programming than will be available over the next three or four years) can take as much as 37 per cent of adult viewing and 53 per cent of children's viewing from the BBC and ITV companies.

Depending on the number of channels available or subscribed to, it would be reasonable to assume that the satellite share of the audience will be between 30-40 per cent.

That should certainly attract advertisers, though they will require better measurement of the size, distribution, and make-up of the audience than is currently available.

Audience research of comparable standards to that of ITV and Channel 4 is "imperative", says Mr Ray Kelly, of TMD, the media independent.

Both BSB and Sky recognise the fact and are negotiating with the BBC and ITV to be incorporated in the new Broadcasters' Audience Research Bureau contract from 1991. In the meantime, both are committed to introducing detailed audience research of similar standards as soon as possible.

Sky has commissioned the research company, RSL, to conduct a weekly telephone survey of 300 individuals receiving its programmes, and by October aims to set up an interim panel conforming to BARB's specifications.

BSB's decision to award a £50m contract for the management of its customer services to British Satellite Systems should provide it with much valuable information for potential advertisers about the nature of its viewers – their numbers, age, sex, location, and life-styles.

Predictions that most satellite viewers are likely to be in the lower income, CD social groups are a source of some dismay for advertisers who have been complaining loudly of late about ITV's slide downmarket.

But the advertising agencies are convinced that the overall long-term outlook for satellite advertising is healthy.

Saatchi & Saatchi's media director, Mr Alec Kenny, and media research manager, Mr Frank Harrison, recently predicted that satellite would become a "significant force".

Young & Rubicam says that while advertisers can reach CD groups readily on ITV, any share gain from the BBC would be welcome.

It is the ability of the satellite channels to attract the elusive young and up-market consumer that will significantly contribute to their success or failure, says Y & R. "The two approaches of general entertainment programming appealing to a broader audience and narrow casting channels to more discrete groups are complementary routes to building audiences which advertisers can reach according to their needs."

Retail, fashion and financial service companies are among those looking for opportunities in satellite coverage of specific audiences – in arts and music programmes for the young, in programmes devoted to women and leisure.

But of the advertisers so far committed to satellite, those in fast moving consumer goods are leading the way. They regard cost efficiency as the most important factor, and express a preference for general family entertainment and film channels.

The ability of satellite TV to attract young, up-market consumers will be crucial

The viewing appeal of the film channels may yet be diminished, however, by the growing film video industry, and the channels will take only a sparse amount of advertising anyway.

Only 12 per cent of advertisers – retail and alcohol, in particular – according to Media Audits, think that opportunities for sponsorship on satellite will be of prime importance.

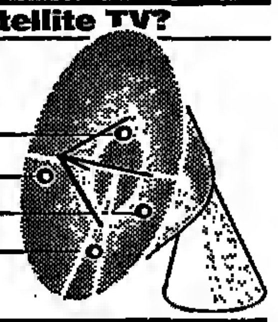
So although advertisers can be expected to turn to satellite in increasing numbers by the mid-1990s, will there be enough of them to provide sufficient revenue to support nine or 10 advertising channels?

Mr Clemens, for one, thinks not, unless a much greater number than the predicted 5m homes are then taking the satellite broadcasts. Total television advertising revenue, assuming an optimistic real growth rate of 8 per cent, will amount to £2.2bn by 1993. On their forecast penetration and audience share, the satellite companies could expect to take 12 per cent of that, or £265m – not much more than Channel 4's income last year.

Though advertising revenue will be important, he forecasts that subscription income will be the vital ingredient of success for both Sky and BSB.

Philip Rawstorne

Will advertisers use satellite TV?



Source: Media Audits Satellite

Anticipated number of satellite TV homes

Source: Media Audits Satellite

High-definition TV: Hugo Dixon on the benefits and the trade row

Incompatible improvements

SHARPER television pictures are on their way. The questions are: when will they arrive, how will they be delivered and will consumers want to pay for them?

The uncertainties over how exactly high-definition television (HDTV) – a new TV technology intended to produce pictures as good as those available in a cinema – will be launched on the world have been deepened by an international trade row.

Politicians and industrialists from Japan, Europe and the US are locked in a struggle over what technological standards should be used for HDTV. The Europeans and Americans, in particular, fear that they will lose large parts of their industry – in computers, micro-electronics and defence as well as in television – to Japanese companies if they accept Japan's proposals. As a result, the world is almost certain to enter the next century with three different and incompatible television standards.

The impetus to create HDTV stems from a belief that the present TV technologies – there are three main systems – do not produce adequate pictures. The image on the screen is fuzzy, blurred and flickers.

There are eight main defects in the present systems:

■ The TV sets have only 525 or 625 lines on them. The amount of detail that can be recorded on a particular picture is therefore limited. For example, it is often impossible to see the texture of an actor's skin or read the fine print in a newspaper. Moreover, if a viewer moves close up to a TV screen, it is possible to see the gaps between the lines.

■ The picture changes only 50 or 60 times a second. A TV image is produced by an electron beam which crosses the screen line by line. Whenever electrons hit the particles of phosphor, which line the inside of the screen, they glow. The problem is that, because the electron beam returns to the same spot on the screen only 50 or 60 times a second, the phosphor particle is not glowing as brightly. This means that the picture flickers.

■ The ratio of the width and the height of the screen is 4:3, unlike the much wider cinema screens which have a ratio of 16:9. The result is that, whenever a film is shown on TV, the sides have to be cut off or black strips are added on the top or the bottom. Analysts also say that people prefer to watch wider screens.

■ Conventional TV transmission systems lead to "ghosting" – the appearance of a shadowy image next door to the main image. This occurs when the radio signals which carry TV pictures bounce off nearby buildings, so creating a type of reflection.

■ The contrast between bright parts of the picture and dark parts is limited. In other words, the brightest white can only be so many times brighter than the darkest dark.

■ The final image contains a lot of "noise" as well as picture that was originally sent. The result is that, if people look closely at a TV screen, the white will not be a pure white but more of a snow-storm.

■ Adjacent lines on a TV screen can sometimes get mixed up. For example, if a newscaster wears a striped ties, the stripes often converge on one another.

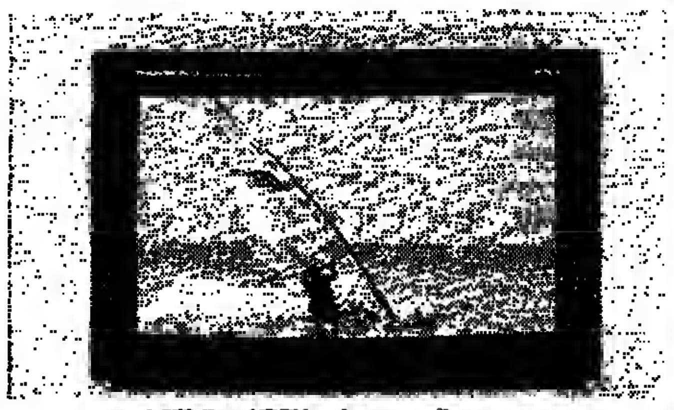
■ The quality of sound that comes with a TV picture is not hi-fi.

HDTV is intended to overcome all these problems and so produce crystal-clear pictures. The way in which this will be achieved – and the various stages on the way to arriving there – vary between the three main trading groups.

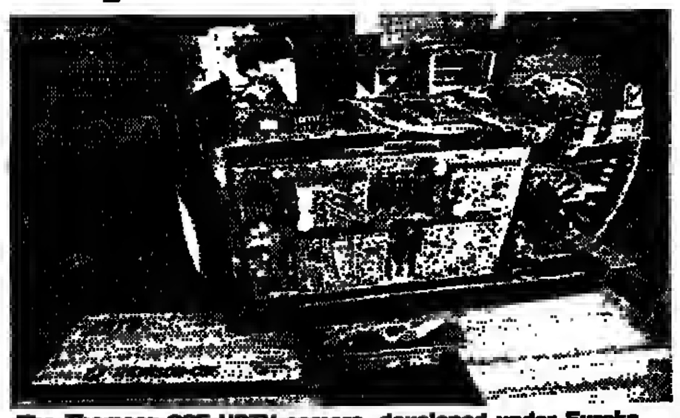
Japan will be the first to introduce HDTV. Its broadcasting authority, NHK, started research into HDTV in 1970. The consumer electronics manufacturers – such as Sony, Matsushita and Toshiba – were brought into the development effort in the mid-1970s. The technology is now ready.

NHK's HDTV system was displayed at last year's Seoul Olympics. Two hundred HDTV sets were set up in prime locations, such as supermarkets, around Japan and the opening ceremonies were broadcast live by satellite. NHK will be launching its own satellite to carry HDTV next year, at which time it will start regular broadcasts.

In the meantime, however, Japan is moving ahead with an intermediary TV technology, called enhanced definition television (EDTV). While this does not have all the features of HDTV, it is an improvement on the conventional system.



A Thomson 1,250-line HDTV colour monitor



The Thomson-CSF HDTV camera, developed under Eureka

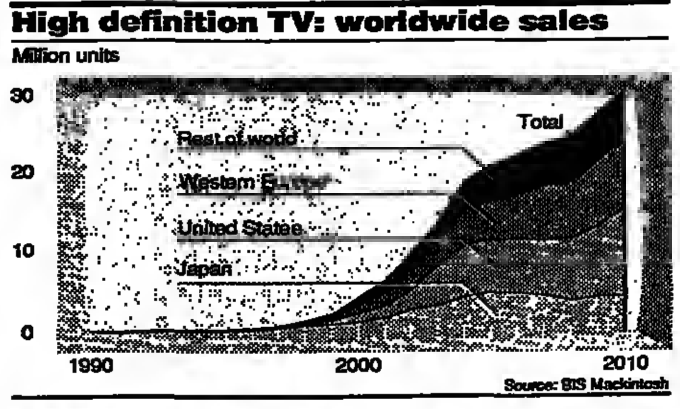
The advantage of EDTV is that it is fully compatible with Japan's present TV system. The pictures are broadcast in the same way – across the surface of the Earth rather than by bouncing them off satellites – and people with conventional TV sets can receive conventional pictures without having to buy any new equipment. To get the better-quality picture associated with EDTV, they have to buy new sets.

Compatibility, however, is not one of the strong points of NHK's HDTV system. It achieves its superior quality by increasing the number of lines on a TV screen from 525 to 1,125.

The consequence of doing this – and of transmitting the pictures by satellite – is that consumers will have to buy convertors if they wish to watch the programmes on either their conventional sets or the new EDTV sets. These convertors have yet to be manufactured, but it is thought they might cost about $200 each.

NHK will continue to broadcast programmes using the conventional system for the foreseeable future, as well as launching the new HDTV service, so consumers will still be able watch some programmes without buying any new equipment. If they wish to view HDTV in its full glory, however, they will have to buy completely new sets, which will probably cost several thousand dollars initially.

High definition TV: worldwide sales



The incompatibility of NHK's HDTV system with conventional TV sets is one of the reasons why European companies have been opposing it. They have formed a joint research initiative, under the banner of the Eureka programme for technology collaboration, to develop their own "compatible" version of HDTV.

Although the Europeans were much later in the game than the Japanese, their research programme is now moving ahead. A final definition of the standard is due to be produced next year, with HDTV broadcasts expected to begin in the mid-1990s.

What has particularly irked the Europeans is NHK's plan to change the picture on the screen 60 times a second – the frequency at present used in Japan and the US – when Europe changes its picture 50 times a second.

To make the Japanese system compatible with existing European TV sets would therefore be more difficult than making them compatible with conventional Japanese sets. Mr Jonathan Drazin, an HDTV specialist at Dataquest, the market analysts, says the cost of making a suitable convertor would probably be more than twice as much.

The Europeans are also annoyed at NHK's plan to use 1125 lines. They argue that the best approach is to double the number of lines on a conventional TV set. Since Europe at present uses 625 lines, Eureka is planning 1,250 for HDTV and keeping the frequency for changing the picture at 50 times a second.

In the meantime, the Europeans are also planning an intermediary step. This is to broadcast pictures by satellite.

This approach has already run into its own parochial standards war. Broadcasters on the Continent have generally decided to use a new transmission standard called D2Mac. British Satellite Broadcasting, which is due to start broadcasting programmes to the UK later this year, has chosen a slight variation of this standard, called DMac. Meanwhile, Mr Rupert Murdoch's Sky TV, which began broadcasts throughout Europe earlier this year, has decided to stick with one of the existing standards, Pal.

The upshot is that consumers will not be able to receive programmes from the different satellites unless they buy several convertors – at least until manufacturers develop convertors which are capable of coping with more than one transmission standard.

Whichever system consumers choose to go with, however, they will have to buy a satellite dish and decoder, which now cost just over £200. Alternatively, they could buy a new TV set incorporating the decoder. In this sense, the European path to HDTV is not fully compatible with conventional sets – something the Japanese have been keen to point out.

All of the intermediate European technologies will eliminate "ghosting", because the reflections that cause ghosting cannot occur if a picture is transmitted by satellite. However, beyond that, the Sky system will offer no improvement in the quality of the image.

By about 1992, a further step on the road to better pictures will take place, with the introduction of Wide Mac. Wide Mac TV sets will be just like DMac sets, except that they will have a wider screen.

This should prepare the way for the launch of the European HDTV system, known as HDMac, in around 1995, Dataquest's Mr Drazin says. One of the advantages of HDMac is that it will be fully compatible with all the other Mac standards – DMac, D2Mac and Wide Mac – although not with the present TV sets.

Mr Drazin, however, questions whether consumers will be prepared to buy the new HDMac sets when they arrive. He predicts they will cost about $2,500 each initially, compared with $1,000 for a Wide Mac set and $500 for an ordinary Mac set of a similar size. Others, however, believe that consumers will be prepared to pay for the extra quality, particularly if they are richer by then.

The situation in America is much more fluid.

Americans have also objected to the incompatibility of NHK's version of HDTV with existing TV sets. The Federal Communications Commission, which regulates the broadcasting industry, said last year that any US HDTV standard would have to be compatible with existing transmission systems. Since America now uses a system with 525 lines and a picture that changes 60 times a second, the most likely option seems to be to keep the frequency at 60 and double the number of lines to 1050.

Earlier this year, 17 US companies – including IBM, the world's largest computer company, and AT&T, the telecommunications giant – said they were considering forming a joint venture to develop a US HDTV standard. This consortium would work on much the same lines as the Eureka programme in Europe, except that the US group would also like to engage in joint manufacturing and marketing as well as research. It will be some time, however, before all this is thrashed out.

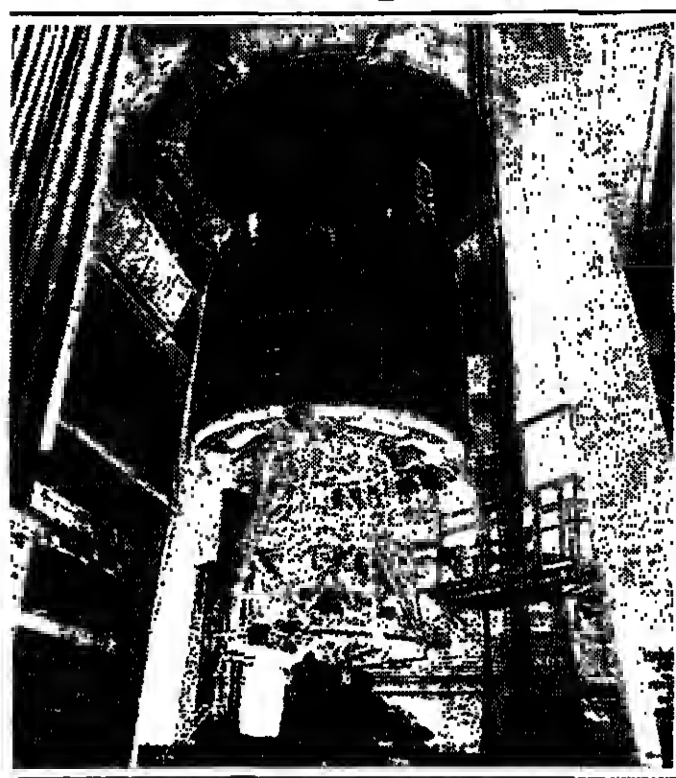
Even then, the US will have a tricky decision about how to transmit HDTV. Most indications are that it will avoid transmitting the pictures by satellite, because earlier attempts to use satellites for broadcasting were not a great success.

However, sending HDTV by radio across the surface of the Earth does not look practicable either, because the air waves are already extremely congested. There is a special problem with HDTV, because it carries more information than a traditional TV signal and therefore needs a larger portion of the radio spectrum.

The most promising method of delivering HDTV is probably cable, particularly fibre-optic cables – strands of glass as thin as a human hair, which are capable of carrying almost infinite amounts of information.

The only snag with this approach is that the costs of investing in cable networks are high. The principal way of changing the economics of this would be to allow telecommunications operators to put television down their networks as well as telephone traffic, so spreading the costs.

At present, this is forbidden in Japan, Europe and the US. However, telecommunications operators on all continents are lobbying for the restrictions to be lifted.



■ Japan's first commercial communications satellite, JCSAT, undergoes space environment testing at Hughes Aircraft Company, California, last month, before being shipped to Kourou, French Guyana, for launch by Ariane booster.

Japan's state-owned NHK satellite service is so well established that it plans to charge fees

Cosmopolitan mix survives the bad weather

THE 100,000 Taiwanese who are regular viewers of direct satellite broadcasts from Japan's state-owned broadcasting company NHK have an unexpected effect of the company's pioneering experience in direct satellite broadcasting (DBS).

Though a commercial station might consider it flattering to have an overseas audience, NHK would rather see the Taiwanese viewers transplanted to Japan, where they would soon have to join others in paying a licence fee for the privilege of capturing the satellite signals.

As it is, they are a minor headache. Money sometimes arrives at NHK from viewers in Taiwan, Korea and other south-east Asian countries, along with requests for programme guides. NHK provides the guides but, as a state-owned company, it is not allowed to keep the money.

NHK was the first broadcasting company in the world to offer direct satellite broadcasting, and its service is now so well enough established that it plans to start charging its estimated 1.4m customers fees in August of this year.

A regular experimental service began on Christmas Day 1986, following the launch of a domestically developed satellite. Initially, it was slow to gain popularity among viewers in Japan, who already can watch two NHK channels and another half-dozen commercial channels. By September 1987, only 8,000 households were able to watch the two additional channels (one educational) provided by the satellite. However, by June last year, that figure had risen to 750,000.

The high initial cost of the set of a 70cm-diameter dish antenna and converter, about Y300,000 (£1,350) was a deterrent to sales, but the prices of these kits have since come down to about Y70,000.

Another problem was bad weather. There were reports that reception deteriorated during storms, or even exceptionally cloudy weather, although that seems to have been solved. Sales have tended to be particularly brisk at the time of major international events, such as last September's Olympic Games in Seoul.

The content of the main satellite channel is a cosmopolitan mix of vintage foreign films, regular and unedited news programmes from broadcasting companies throughout the world, frequent US baseball and football game broadcasts, and blanket real-time coverage of big events such as the Olympics and rock concerts.

Virtually every foreign programme is presented bilingually, either with Japanese subtitles or with a separate Japanese sound-track. Elsewhere, such coverage might be redundant, but ordinary Japanese programming is firmly focused on domestic concerns, and there is a growing cadre of Japanese families who have lived abroad and acquired a taste for foreign entertainment.

All of this development does not come cheap. It took Y61bn to put up the two DBS satellites that NHK currently has in orbit (one is a back-up). Of that, NHK paid 60 per cent and the Government the rest. Next year NHK will launch the first of two new satellites to replace the current BS-2 series, at a cost of Y78.4bn. The cost of the launching will be shared three ways between NHK, the Government and a consortium of commercial stations. NHK also plans another launch this December, from the US, to make sure that it has back-up in the sky in case one of the two existing ones fails. Cost: Y14.5bn.

Virtually every foreign programme is presented bilingually

NHK's main source of revenue is a license fee on all owners of television receivers, just like the BBC in the UK. However, it also receives generous subsidies from the Government, not least for projects like DBS. The Government has recently been pressuring it to tow more of the load, but the DBS service is not likely to provide much help for some time. Mr Hisashi Noguchi, executive producer of NHK's satellite broadcasting headquarters, says that the DBS service will pay its own way eventually, but he expects it to lose money for the first five years.

Also, the company is going to have to face competition in the near future. A consortium of commercial broadcasters has bought a channel on the next satellites (NHK has the other two). Mr Noguchi said the consortium, Japan Satellite Broadcasting Corporation, would be charging fees on a per-programme basis, so he did not think it would detract from NHK revenues.

The DBS project is also related to another NHK high-technology development: high-definition television. Called Hi-Vision by NHK, and trumpeted to be the most significant technological advancement in colour TV since colour replaced black-and-white, high-definition television uses 1,125 scanning lines for its image, along with digital sound, like that used in compact discs. HDV has a market potential perhaps greater than that for any other single consumer electronics product, and controversy over setting international standards has been swirling around the world for months.

"Hi-Vision is highly dependent on DBS," says Mr Noguchi. Though Hi-Vision can use other more conventional means of transmission, "DBS is paving the way for full operation of high-definition television," he says.

NHK demonstrated the combination during last summer's Olympics, transmitting signals from Seoul to high-definition TV screens installed near crowded train stations and in front of department stores in Japan.

When Hi Vision becomes available, NHK may want to guard its signals more carefully. Mr Noguchi said the company was already examining ways of scrambling the signals, and might implement a scheme once the new satellites are launched. Such a move may be effective, but it would not be popular in Taiwan.

Chris Perry

■ A television camera team from Worldwide Television News (WTN), London, wearing protective clothing on location during riots in Seoul, Korea. Satellites have revolutionised the accessibility of international TV news.

With more broadcasters providing their viewers with 24-hour news services, the world demand for such facilities is becoming greater.

Only a few years ago, the main 'safe' areas with relatively easy satellite links were Australia, New Zealand, Middle, South Africa and Japan. Today, with greater availability and expertise in satellite broadcasting, access to pictures from countries such as Zambia, Angola, Peru, Venezuela and Argentina is relatively straightforward.

FINANCIAL TIMES
COMPANIES & MARKETS
Tuesday March 14 1989

INSIDE

The security of treasure island

The bitter argument between Japanese banks and securities companies over access to each other's territory could come to a head in the next few months. And it is the banks that will be making the running — pressing for changes to rules which keep them out of the vast and lucrative domestic securities markets. For their part, the securities companies will be fighting to keep a controlling hand on the treasure chest. Stefan Wagstyl reports from Tokyo. Page 29

Elders hears call of the wild

Melbourne-based Elders group, headed by John Elliott (left), is once more ploughing an expansionary furrow across Canada — this time in a remote region of the Lower St Lawrence North Shore, about 700 miles north-east of Montreal. It plans to buy 75 per cent of Quebec Cartier Mining (QCM), the country's largest iron-ore producer, from USX of Pittsburgh. Robert Gibbens explains why QCM, set up some 30 years ago to develop part of the immense iron-ore resources of the Quebec-Labrador Trough, has been on the block for some time. Page 27

Strong brew out of Africa

Malawi is Africa's second biggest tea producer, but with limited land available and growing conditions that are far from ideal it can never rival Kenya, the continent's number one, either in quantity or quality. Nevertheless, no effort is being spared to boost yields and maximise the quality of the country's "low medium" grade tea. Page 34

The long and winding road

Small in value it may be, but First Technology's offer for Ricardo, the Sussex-based vehicle design group, has had its fair share of controversy. The contested bid's path towards its final close tomorrow is strewn with court actions, nominee shareholdings, a mistaken acceptance, and a clarified corporate brochure. These, however, should not be allowed to obscure the central industrial issue involved in the takeover. Nikki Tait explains why. Page 32

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Chief price changes yesterday

FRANKFURT (DM)				PARIS (FFr)			
Rises				**Rises**			
Linde	797	+	8	Lechelle	383.5	+	3.6
Thyssen	226	+	2.3	Nord-Est	147	+	3.4
Kaufhof	418.5	+	2.5	Scoa	74.9	+	3.9
Falls				**Falls**			
Daimler Benz	687.5	–	5.5	Beghin-Say	625	–	3.5
Hoechst	295	–	3.3	BHV	503	–	3.6
Veba	285.2	–	2.7	Immobiles Mons.	389	–	6.3

NEW YORK ($)				TOKYO (Yen)			
Rises				**Rises**			
Boeing	86 7/8	+	7/8	Sanyo Sp. Steel	1200	+	90
Gen. Housewares	13 3/8	+	1 1/2	Takakita	2200	+	160
Shaklee	47 3/8	+	9 1/4	Yuasa Battery	1160	+	90
Barry Wright	5 3/8	+	5/8	**Falls**			
Falls				Noritz	2340	–	160
Dun & Bradst.	46 7/8	–	7/8	Sanyo Seiko	1060	–	80
Pennwalt	117	–	1 1/2	Shinkoro	1500	–	120

LONDON (Pence)							
Rises				Rosehaugh	619	+	42
AngloLeasing	479	+	16	Trafalgar Hse.	390	+	15
Antofagasta	410	+	25	Utd. News.	464	+	11
Candover Inv.	588	+	25	Wellcome	477	+	15
Citygrove	257	+	17	**Falls**			
Clarke Hooper	178	+	8	Greenall Whit.	315	–	12
Countryside	309	+	11	Lec Refrig.	330	–	8
Crosby (James)	138	+	13	Low & Bonar	258	–	9
DSC	77	+	15	Owen & Robinson	315	–	18
Fuller S.T.A.	455	+	15	Smallshaw (R.)	77	–	8
Glamar Grp.	156	+	26	Transport Dev.	245	–	17
Glaxo	1307	+	38				
Miller & Sant.	235xd	+	26				
P & O Defd.	723	+	21				

Henkel plans to buy US chemical producer

By Peter Marsh in London

HENKEL, West German's fourth biggest chemicals company, announced yesterday the proposed $480m cash purchase of the industrial-materials division of Quantum Chemical, a US chemicals producer.

The deal, which under US law is subject to approval by the Federal Trade Commission, would extend Henkel's activities in the US, bringing the company's annual sales there to about $1bn.

The purchase would also strengthen Henkel's position as a world leader in fatty chemicals manufacture of the type produced by Quantum's unit. These materials are based on natural oils and used in various industries including cosmetics, pharmaceuticals and plastics.

The acquisition is part of a trend for German chemicals companies to increase their presence in the US, the world's biggest chemicals market. The German chemicals industry — mainly in the shape of BASF, Bayer and Hoechst, the three biggest German chemicals groups — employs about 75,000 people in the US and has annual sales there of more than $18bn.

Under yesterday's agreement, Henkel plans to buy Quantum's Emery fatty-chemicals unit which should enable Quantum to concentrate on its core business area of plastics production.

New York-based Quantum, which has annual sales of $2.9bn and until just over a year ago was called National Distillers and Chemical, said yesterday that it hoped the Henkel deal would receive ratification by the trade commission within 30 days.

Quantum is the US's biggest producer of polyethylene, a plastic widely used in packaging, containers and pipes, and claims a fifth of the US's $10bn-a-year market in this material.

The Emery unit employs 1,500 people at five US plants and has annual sales of about $350m, virtually all in the US.

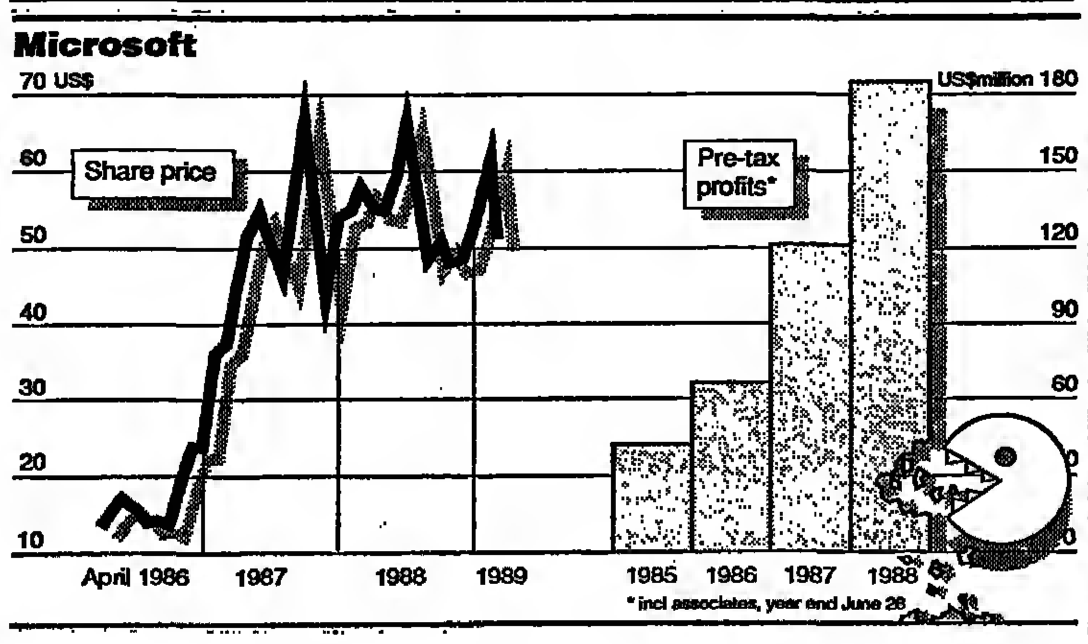
Quantum said it believed it had obtained a "good fair price" for the Emery division, which it had announced three months ago it planned to sell as part of the programme of concentrating on core areas. Apart from its plastics activities, Quantum also has a small unit selling propane gas.

Düsseldorf-based Henkel, which has for some time been trying to build up US sales, said yesterday the purchase would bring a "new dimension" to its activities in that country. Of the company's revenues last year of DM10.2bn ($5.5bn) just $650m came from US sales.

About a third of Henkel's current sales come from manufacture of fatty chemicals and other industrial materials like soda ash.

Much of the company's production of fatty chemicals, which are based on vegetable products such as oils of soya, coconut and palm, is channelled as raw materials into other parts of Henkel's manufacturing activities. Besides industrial chemicals, Henkel also makes detergents, toiletries and cleaning agents.

Other leading producers of fatty chemicals include Procter & Gamble, Sherex and Witco of the US and the Anglo-Dutch Unilever.



Into the clutches of the killer bugs

Louise Kehoe explains how software problems have spoiled Microsoft's unblemished growth record

The killer bugs that have sunk their teeth into many of America's top personal computer software development companies have eventually caught up with Microsoft Corporation, the industry's fast-moving leader.

Their ill-timed arrival will cause delays in the launch of two important new products and put an end to 13 successive quarters of profits growth. Their coming has also taught Microsoft a vital, if expensive, lesson.

"We have discovered a new rule," says Mr Jon Shirley, group president, "when you increase the size of a program by 50 per cent, it takes 100 per cent or 150 per cent more time to debug it."

Last week Microsoft revealed shipments of its two new programs would be delayed until April and third quarter revenues would fall to between $180m and $200m. The news immediately wiped $8¼ off a share price which finished the week $10¼ lower at $51¾.

All of this has come as a nasty shock to a company that has seen revenues soar from $197.5m to over $590m since it went public three years ago.

The group is tha latest and greatest of several PC software companies to be hit by "the bugs" — program problems that are serious enough to postpone shipment of a new product — and its troubles provide strong evidence of the tougher times being faced by even the biggest companies in the software development sector.

For example, Lotus Development, the second largest company in the industry after Microsoft, has already been beset by problems with a long-overdue revision of its popular spreadsheet program Lotus 1-2-3 Release 3, and Ashton-Tate, another market giant, is six months late with one of its database management products.

Dozens of smaller software companies are also way behind delivery schedules. But et Microsoft the situation is particularly difficult because two major products have been delayed at the same time.

A revised version of Microsoft Word for IBM-style PCs and an npdeted release of Word for Apple Computer's Macintosh will both be delayed.

"Normally, we would prefer to keep new releases dates out of synch," says Mr Shirley "but in this instance the two revisions coincided." Problems with both programs are not linked, he adds.

"We underestimated the time it would take to fix bugs and test the programs," says Mr Jeff Raikes, manager of Microsoft's office business products unit.

The task of ridding computer programs of problems is becoming increasingly difficult as software becomes more complex. To be competitive, PC programs must include an ever increasing range of functions, but this means longer and longer programs.

Compounding Microsoft's problems is an earlier decision to stop making the current versions of the two word processing programs. Microsoft is now sold out and will not be able to offer its distributors new supplies until the new versions are complete.

Mr Raikes says he has "a fairly high degree of confidence" that the April shipment deadline can be met. In the meantime, however, Microsoft's distributors and customers must wait — or buy e competing product: a fact that could have a significant impact on group revenues for the current quarter as word processing products represent "more than 15 per cent" of the company's business, according to Mr Shirley.

Adding to Microsoft's headaches, and potentially causing problems for other US software publishers, some of the largest wholesale and retail distributors in the US have reduced orders for applications programs, languages and other programs typically sold after a computer has been purchased.

For Microsoft, such sales throogh US distribntors and retailers represented 31 per cent of revenues last year.

Egghead Software, the discount software chain that is Microsoft's largest retailer, however, is reducing its inventory following senior management changes.

Also slowing new orders is the recent marger and subseqnent reorganisatioo of Micro D and Ingram Indnstries, two of the largest wholesale software distributors in the US.

These changes may explain slower than expected February sales, says Jon Shirley. But he maintains that the distribution problems and product delays are only temporary setbacks.

Unlike most other software publishers, Microsoft has a solid base of systems software products to fall back on if its applications program sales falter.

Sales of systems software, which includes the MSDOS operating system program incorporated in virtually all IBM and IBM-compatible PCs remain strong, says Microsoft. The company projects worldwide shipments of 12.3m IBM-compatible PCs in the 12 months ending June 1989, an increase of 1.5m on the previous year. This would help to boost sales of systems software, which represented over 30 per cent of revenues last year.

The most important market trend for Microsoft, however, is the move towards higher performance PCs, sales of which are expected to grow by about 40 per cent this year.

Microsoft is placing high priority on OS/2, a new high-performance PC operating system which it aims to turn into the industry standard.

First announced in 1987 when IBM launched its PS/2 range of PCs, OS/2 remains in the development stage. Hundreds of application software developers are designing programs to run on the system, but the majority of end users have yet to adopt it.

In its OS/2 crusade, Microsoft has an important ally. IBM is heavily committed to the operating system and is working closely with the software company to develop future versions of the program. In fact, Microsoft's ties with IBM, which go back to the time when IBM first entered the PC market and adopted Microsoft's MSDOS operating system, remain one of the software company's greatest strengths.

Microsoft's ability to continue to work with IBM, while simultaneously maintaining the trust of IBM's largest rivals in the PC industry, such as Apple and Compaq Computer, has helped to win the company a repntation for shrewd management.

That image has been slightly tarnished by the latest product delays. Bot it is one that could quickly be repolished by strong revenues and profits in the fourth qoarter — an objective Microsoft says it is confident it can achieve.

Heron to sell insurance subsidiary

By Nick Bunker in London

MR GERALD Ronson's Heron International group has struck a deal to sell its UK motor insurance subsidiary, National Insurance and Guarantee Corporation (NIG), to Sweden's Skandia International for an undisclosed sum thought by observers to be at least £150m ($256).

Skandia International, owned by the Skandia insurance group, is the world's fifth largest reinsurer. Like other major European reinsurers, it has been pursuing a strategy of building up direct insurance interests by acquisition.

The purchase comes as the UK motor insurance market is reaching the top of one of its underwriting cycles, with profitability expected to deteriorate in 1990 and 1991.

Skandia International knew this, said Mr Hans Beendorf, a Skandia spokesman, but took a long-term view of the business. "We are operators, not traders in companies," Mr Beendorf said.

A major factor behind Skandia's strategy is a perception that reinsurance is a mature industry, with primary insurance companies buying less of it as they grow in size. The imminence of a post-1992 free market in insurance in Europe also meant that "you have to be established in every country," Mr Beendorf said.

Eighty per cent of NIG's 1988 gross premiums of £165m came from motor insurance, mainly for private cars. About three-quarters of the non-motor element of its portfolio is package policies for small to medium sized businesses, said NIG's managing director, Mr John Gaynor.

Insuring 700,000 motor vehicles, London-based NIG has about 3 per cent of the UK motor market, ranking about tenth in premium volume, near to the size in motor insurance of Commercial Union and Prudential Assurance.

NIG's preliminary results for 1988 showed pre-tax profits of £22.8m, with shareholders' funds of £101m. Mr Alan Goldman, Heron's deputy chief executive, said NIG had a £70m commercial property investment portfolio, but this had been bought by Heron.

Heron put NIG up for sale last September. Mr Goldman said interest in it had been "quite strong", mainly from Europe. Skandia will keep NIG's present management and system of marketing insurance via 3,500 independent intermediary outlets.

The acquisition will require approval from the Department of Trade and Industry

Glaxo unveils 16% profits rise

By Peter Marsh in London

GLAXO, Britain's biggest pharmaceutical company, gave the City a pre-Budget boost yesterday by unveiling a 16 per cent rise in interim pre-tax profit for the first half of the group's financial year.

The taxable profit of £460m ($786m) was above many analysts' expectations. It compared with a profit of £397m for the corresponding period of 1987 and was made on sales of £1.12bn, a 21 per cent increase on last time. Earnings per share in the six months to 31 December 1988 were 42.8p, an increase of 17 per cent.

Sir Paul Girolami, chairman, also announced an interim dividend of 10p, compared with 7p in the first half of the previous financial year.

The City was impressed and Glaxo's shares closed at 1307p, up 38p on the day.

Sir Paul said he remained bullish about Glaxo's prospects for the rest of the financial year. He said the company — which is the world's second biggest drugs company — was increasing its sales at double the rate of the pharmaceutical business as a whole and he was still confident of overtaking Merck, the world's biggest drugs company.

Glaxo's strong performance in recent years, during which it has risen quickly up the ranks of the world's pharmaceutical companies, has provided the group with a cash mountain of £1bn. Sir Paul said yesterday, however, that he had no desire to spend any of this on acquisitions.

The mainstay of Glaxo's performance in the first half of the financial year, as has been the case for some time, was Zantac, the anti-ulcer drug which is the world's biggest selling medicine. Sales for the six months rocketed by 26 per cent to £556m.

Revenues from anti-asthma products — chiefly Ventolin and Volmax — grew by 25 per cent to £264m.

Mr Bernard Taylor, Glaxo's chief executive, pointed out, however, that sales of the 20-year-old Ventolin are beginning to slow owing to competition from similar drugs.

Ventolin had estimated sales for 1987 of more than £200m.

Mr Taylor said sales for the first half in North America had been particularly impressive at £480m, up 39 per cent. Revenues from the UK rose by 15 per cent to £152m, while sales in the rest of Europe were £340m, a 6 per cent increase.

Capital spending for the half year was £141m, compared with £121m last year, with half of the current spending going on new research facilities.

Trading profit for the six months was £421m (£370m); after-tax profit, £318m (£272m). Lex, Page 22

Volcker company in tie-up with Fuji Bank

By Anatole Kaletsky in New York

THE Wall Street investment banking boutique, James D. Wolfensohn Inc, headed by Mr Paul Volcker, the former chairman of the Federal Reserve Board, yesterday announced a major strategic partnership with Fuji Bank of Japan.

The Wolfensohn-Fuji deal was the latest in a series of investment banking tie-ups in which former top US government officials will be working to facilitate Japanese acquisitions of businesses and assets in the US.

The new partnership will take the form of a joint venture, to be called Fuji-Wolfensohn International, which will "provide advice on strategic financial matters, mergers and acquisitions and a range of business relationships between US and Japanese entities".

It will be capitalised with $50m of preferred stock from Fuji plus $2.5m of common equity from each of the two partners.

Although the firm will be small, with only about six full-time professionals to start with, its symbolic significance may be considerable, given Mr Volcker's reputation in financial and policymaking circles both in the US and Japan. Mr Volcker left the Fed in the summer of 1987 and became chairman of Wolfensohn Inc last year.

Apart from Mr Volcker, other top US officials who are currently working on Japanese-US acquisitions include Mr David Stockman, President Reagan's first budget director, Mr Peter Petersen, a former Commerce Secretary, Mr William Simon, a former Treasury Secretary and Mr Tim McNamar, formerly Deputy Treasury Secretary.

Wolfensohn Inc, whose chief executive is Mr James Wolfensohn, a former Salomon Brothers partner, is one of Wall Street's leading small investment banks or "boutiques", specialising in agreed mergers and long-term corporate finance relationships. It has not had extensive Japanese business in the past but has advised on many foreign takeovers of US companies. Fuji Bank is Japan's third largest bank with assets of more than $345bn.

INTERNATIONAL COMPANIES AND FINANCE

RVI profits up sharply at FFr1.2bn

By Paul Betts in Paris

RENAULT VEHICULES Industriels (RVI), the large truck *manufacturing subsidiary of* the French state-owned Renault group, yesterday reported a sharp rise in consolidated group profits last year to FFr1.2bn ($190m) from just FFr182m in 1987.

Mr Philippe Gras, RVI's chairman, forecast a further significant rise in group profits this year if the European truck market remains buoyant. However, even in the unlikely event of a steep decline in the European truck market of between 15 and 20 per cent this year, RVI would still earn as much this year as last, he said.

The announcement of RVI's better-than-expected financial performance is expected to be followed next Tuesday with the announcement of record 1988 profits by its parent Renault. *The state car group is likely* to report net profits substantially higher than its earlier estimate of earnings of FFr6bn compared with FFr3.7bn in 1987.

Mr Gras said RVI's sales rose to FFr33.9bn last year from FFr29bn in 1987. Mack, the US truck maker 45 per cent owned by RVI, saw its earnings rise to $31.8m last year from $4.1m the year before, with sales up from $1.9bn in 1987 to $2.1bn last year.

Mr Gras said Mack was expected to see its profits rise to around $50m this year. However, in the medium term, the French group has set the American truck maker a target of annual net profits of around $100m.

RVI's sharp improvement reflected the combination of *additional productivity gains* and the buoyant state of the European truck market, Mr Gras said. RVI had achieved overall productivity gains of about 20 per cent last year, he added.

In sales terms, RVI now ranks second in the world truck league after Daimler-Benz. The group's European market share rose from 11.8 per cent to 12.3 per cent last year, while in North America its market share grew to 15.4 per cent from 14.9 per cent.

Mr Gras said the group's net indebtedness had been further reduced to FFr5.8bn at the end of last year from FFr6.5bn the year before. The group's worldwide workforce had also declined to 34,151 people last year from 34,792 a year earlier.

Mr Gras said RVI's target continued to be the stock market flotation of the large Renault truck subsidiary, but he acknowledged that this was unlikely to take place before the end of next year or early 1991.

After lending a total of FFr1.2bn to help consolidate RVI's balance sheet two years ago, France's three biggest commercial banks including Banque Nationale de Paris, Crédit Lyonnais and Société Générale now hold warrants which, when converted, will enable them to hold between them nearly 30 per cent of RVI's capital. The banks have until the end of next year to convert these warrants.

Crédit du Nord reaps rewards of pruning

By George Graham in Paris

CREDIT du Nord, the commercial banking subsidiary of France's Paribas group, returned to profit last year after FFr600m ($96m) of losses in the two previous years.

Mr Bruno de Maulde, president, said the group had made a consolidated net profit of FFr59.3m in 1988, after a loss of FFr157.6m in 1987. The bank itself came close to break-even, he said, with a loss of FFr6.7m after losing FFr249.8m in 1987.

Crédit du Nord was probably the French bank that had changed the most radically over the past three years, Mr de Maulde said, both to make up the ground it had lost to its competitors and to face the evolution in financial markets.

The bank has rapidly cut its workforce to around 8,000, from more than 10,000 at the end of 1985. Last year it closed 75 branches.

Group gross operating profits rose by 28 per cent to FFr963.7m, but Crédit du Nord's domestic banking activities still made a loss of FFr55m before exceptional earnings of FFr50m, mostly from the clawback of provisions made on its securities portfolio in the wake of the 1987 stock market crash.

However, the bank continued to make heavy general provisions, devoting a consolidated total of FFr1.06bn to this purpose, compared with FFr689.6m in 1987. Country risk provisions totalled FFr354m, bringing the group's coverage from 28 per cent to 42 per cent of its potential exposure.

Mr de Maulde said Crédit du Nord was still far from reaching the capital adequacy ratios proposed by the Cooke Committee of the Bank for International Settlements, although as a wholly-owned subsidiary of the Paribas group this would not cause any technical difficulty.

The bank recently raised FFr1.5bn through an issue of *perpetual subordinated debt*, but is thought to need nearly as much again to reach the proposed BIS requirement for capital.

Premier rejects flotation and puts itself up for sale

By Lisa Wood

PREMIER BRANDS, the UK food company, has abandoned plans for a public flotation this April and put itself up for sale instead. Analysts put a £200m-plus ($344m) price tag on the Birmingham-based company, which owns brands including Typhoo Tea, Marvel instant milk and Chivers Jams.

The surprise change in strategy from one of Britain's most ebullient young food companies has provoked the resignation of Mr Paul Judge, the company's chairman. Mr Judge led the £97m management buy-out of the business from Cadbury Schweppes in 1986.

Mr Martin Bralsford, the former finance director, who replaces Mr Judge, said Premier, with borrowings of about £90m, needed greater resources to fund the marketing and plant investment necessaryto exploit its brand portfolio.

If the company had taken the flotation route, the board would have had to issue so many shares to clear its balance sheet of debt that it would have lost control of the company anyway – at a time when it would have been vulnerable to a bid.

Lazards Merchant Bank is contacting a number of companies that Premier believes might be interested in buying it. Mr Bralsford said: "We want to find another large and financially stable food company that we can blend into while at the same time retaining our identity."

He said his former chairman did not relish the prospect of becoming part of a larger company. "Paul was very keen on maintaining our independence," said Mr Bralsford. Mr Judge and eight other investor-managers own 75 per cent of Premier's equity.

The surprise announcement of the sale came on the same day as the company's annual results which, for the year to December 31 1988, showed a pre-tax profit of £20.5m, an increase of 14 per cent on the previous year.

Sales for the year increased by 25 per cent to £393m from £315m previously. The trading profit increased by 28 per cent to £31.8m from £24.9m, and earnings per share increased by 25 per cent to 32.5p.

Mr Bralsford said that in the first couple of years after the buy-out Premier had kept capital expenditure below £5m. However, this had risen to £10.2m in 1988 and was expected to rise to £32m in 1989.

In addition, marketing expenditure was likely to reach a similar sum this year.

Borrowings would rise to more than £100m this year.

Nobel sales rise 53% to SKr21.3bn

By Sarah Webb

NOBEL INDUSTRIES, the Swedish armaments and chemicals group, said yesterday that the strong performance of its chemicals for the pulp and paper industry, consumer goods and paints/adhesives operations helped to lift profits (after financial items) by 50 per cent to SKr934m ($147m) last year.

Group sales climbed 53 per cent to SKr21.3bn from SKr13.92bn in 1987. The board proposed raising the dividend from SKr2.5 to SKr3.25 per share.

Invoiced sales for the group's pulp and paper chemicals division rose by 33 per cent to SKr2.37bn, while profits soared by 90 per cent to SKr310m.

At the adhesives and paints division, sales climbed 53 per cent to SKr6.35bn, while profits increased by 26 per cent to SKr407m.

The ordnance division reported a 43 per cent increase in sales to SKr5.347bn, although profits fell by 24 per cent to SKr270m.

The consumer goods business, which sells hair-care and hygiene products, increased profits by 31 per cent to SKr141m while sales rose by 7 per cent to SKr1.4bn.

Merieux in joint venture deal

By David Owen in Toronto

INSTITUT Merieux, the Lyons-based vaccines subsidiary of France's Rhône-Poulenc, and Canada's Connaught BioSciences have agreed to combine their worldwide human-health businesses.

The alliance will forge a major pharmaceuticals company with annual revenues of more than C$500m (US$418m). The new entity, to be named Merieux Connaught, will be incorporated in Holland for tax and administrative reasons.

Under the terms of the deal, shareholders of Connaught and Merieux will each receive 50 per cent of the new enterprise. However, Merieux will assume effective control by virtue of its existing 12.6 per cent stake in Connaught. Fully diluted, Merieux's interest will amount to 51.4 per cent.

Bio-Research Laboratories, Connaught's wholly-owned scientific research services unit, is excluded from the transaction. Shares in Bio-Research will be distributed to Connaught shareholders as part of the deal's plan of arrangement.

Merieux will segregate its human-health business into a new subsidiary, IM Human Health. The new unit will contain all of Merieux's human-health business, its 50.7 per cent stake in Pasteur Vaccins, two other subsidiaries, its international marketing operations and a 20 per cent interest in a potential pre-AIDS therapeutic product.

Net earnings at Connaught, the West's largest manufacturer of influenza vaccines, totalled C$28.9m last year on revenues of C$192.5m.

Fermenta back in black after reshape

By Sara Webb in Stockholm

FERMENTA, the Swedish antibiotics, chemicals and finance group with a chequered past, announced a return to profit for 1988 but said it did not intend to pay out a dividend until 1989.

Fermenta turned in a profit (after financial items) of SKr110m ($17.3m) compared with a loss of SKr78m in the previous year. The group said it expected the profit improvement to continue in 1989.

The recovery stems from Fermenta's restructuring under new management, the strong performance of its plant protection and animal health business and improvements at its Italian pharmaceuticals division.

However, the improvement was concentrated in the first nine months of the year – when profits after financial items reached SKr106m – because of the seasonal nature of agrochemical sales.

Group sales edged up 1 per cent to SKr2.77bn for 1988. The chemicals and pharmaceuticals operations accounted for SKr2.25bn in sales, a drop of 18 per cent on the previous year due to the divestment of loss-making antibiotics operations.

Last October's SKr1.3bn acquisition of Independent Finans, Sweden's largest listed finance company, added SKr524m to group sales for the year. The deal, which allowed Fermenta to break into the financial sector, was intended as a way of generating a cash-flow in Sweden.

Fermenta was a high flier on the Stockholm bourse in the mid-1980s under Mr Refaat El-Sayed, the Egyptian-born chief executive who built it up from scratch. However, the company's fortunes nose-dived when external auditors discovered irregularities in the figures for 1986, setting off lengthy investigations into the scandal.

BSN makes Italian acquisition

By George Graham

BSN, the leading French foods group, is continuing its expansion into southern Europe with the acquisition of a 35 per cent stake in the Star foods company, an Italian group with strong positions in the Italian and Spanish sauces, spices and broth cubes markets.

Ifil, the holding company of the Agnelli family with which BSN has already moved into the Italian mineral water and beer sectors with a series of joint ventures, will take a further 10 per cent.

The combined stake will cost around L412bn ($300m), paid for mostly in shares. Findim, the family holding company of Mr Danilo Fossati, Star's owner, will end up with stakes of 5.6 per cent in Ifil and around 4 per cent in BSN, with Mr Fossati sitting on the boards of both companies.

Star, which is best known in Italy for its broth cubes, also produces tomato-based sauces, spices, condiments, canned vegetables, chocolate spreads and teas. It has annual sales of around L880bn, three quarters of these in Italy and one quarter in Spain. BSN said yesterday that it would form a joint venture with Star to expand in new markets, especially pasta, prepared dishes and biscuits. In addition, BSN would put its world distribution network at the disposal of Star for marketing its own products, especially Italian prepared dishes and tomato-based sauces.

Bührmann in Ahrend takeover talks

By Laura Raun in Amsterdam

BUHRMANN-Tetterode, the Dutch paper and packaging group, and Ahrend, an office furnishings company in which it has acquired a 30 per cent stake, are to discuss a possible takeover.

Bührmann said yesterday that if the talks succeeded it would launch a public offer for the rest of the Amsterdam-based company.

If talks fail, Ahrend intends to be armed with a classic Dutch anti-takeover defence. Ahrend said yesterday it would issue preferred shares equalling the number of common ones and place them in a foundation to safeguard the "identity and continuity" of the company.

However, Ahrend added that it would judge Bührmann's offer on its merits. Ahrend's share price continued to climb yesterday after spurting up 17 per cent last week.

Bührmann also disclosed yesterday that it was discussing further acquisitions with various foreign companies active in office automation. Last week it announced it had bought Bex-Büro group of West Germany, which sells, leases and maintains office copiers, fax machines and other automation equipment. Bührmann said two years ago it wanted to strengthen its position in these areas.

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AKZO

Amexco president to head RJR

By Anatole Kaletsky in New York

RJR NABISCO, the Atlanta-based foods and tobacco conglomerate which was taken private for $25bn earlier this year in the biggest corporate takeover in history, yesterday named Mr Louis Gerstner, president of American Express, as its new chairman and chief executive.

Recruiting Mr Gerstner, a manager who commands great respect on Wall Street and in the US business community, was seen as an important achievement for Kohlberg Kravis Roberts, the specialist leveraged buy-out (LBO) firm which is RJR's new owner. In its previous LBOs, KKR has almost invariably relied on the existing management teams to run the companies it has taken over.

Until the RJR takeover, Mr Henry Kravis and Mr George Roberts, KKR's senior partners, frequently stressed that managerial continuity was one of the main merits of their approach to takeovers.

In this case, however, KKR found itself bidding against another LBO group led by RJR'e own management, and thus found itself in the unusual situation of buying a huge and extremely complex business devoid of top management. By Mr Kravis's own admission, this substantially increased the risks of the RJR acquisition.

In Mr Gerstner, who is 47, KKR has hired an executive with no direct experience of the tobacco or food industries, but with a high reputation for operational management, marketing and strategic planning.

As president of American Express, Mr Gerstner was chief operating officer of one of the country's most successful financial and consumer enterprises. In addition to his operating responsibility for Amexco as a whole, where he was second-in-command to chairman Mr James Robinson, Mr Gerstner was chief executive of the American Express Travel Related Services, the group's core charge card and travel business.

Mr Gerstner, who joined Amexco in 1978, was widely credited with sustaining the company's market leadership in the extremely profitable and rapidly changing credit card business. He was also responsible for implementing the strategy of aggressive acquisitions and divestitures which Amexco had followed in the financial services business over the past ten years.

Amexco announced yesterday that Mr Robinson would be assuming the duties of chief operating officer of the American Express Group as a whole, while Mr Aldo Papone, Mr Gerstner's deputy, would become chief executive of Travel Related Services.

Apart from the chance of running his own $20bn company, Mr Gerstner was offered a number of powerful financial lures to join RJR. His five-year contract is understood to start with an annual salary of at least $2.3m, which rises to more than $3m.

He will also receive a multi-million dollar signing bonus designed to compensate for the loss of various Amexco stock benefits. However, the most important part of Mr Gerstner's remuneration will come in the form of a large ownership interest in RJR.

Gerstner: sustained market leadership at Amexco

The precise level of Mr Gerstner's equity stake was not disclosed, but on the basis of past KKR practice it could be worth more than 10 times his total salary provided he managed to meet stringent cash flow and debt repayment targets.

Repap buys Manitoba pulp mill for C$132m

By Robert Gibbens in Montreal

REPAP Enterprises, Canada's fastest growing pulp and paper company, has bought the troubled Manfor pulp mill from the Manitoba Government for the equivalent of C$132m (US$110.3m).

Manfor's 150,000 tonnes a year unbleached pulp mill at The Pas will be modernised to produce 180,000 tonnes of bleached kraft softwood pulp over the next 18 months for C$200m.

Repap will pay C$40m in cash and the balance in Repap preferred shares.

The group has also undertaken to invest C$800m building a new bleached kraft softwood pulp mill in the same area with annual capacity of 425,000 tonnes.

The Manitoba Government will provide $150m in loan guarantees for this project which is due to start in 1994.

In 1988 Manfor made a small profit for the first time in many years following an increase in pulp prices. The mill lost $76m between 1981 and 1986 and the Government wrote off its $128m investment.

Yamanouchi agrees to pay $395m for Shaklee

By Roderick Oram in New York

YAMANOUCHI Pharmaceutical, a leading Japanese drug company, is to broaden its presence in the US market with a $395m agreed takeover of Shaklee, a direct marketer of health care, nutritional and other household products.

The deal, announced yesterday, is aimed at thwarting a $40 a share takeover offer launched recently by Mr Irwin Jacobs, the once active corporate raider. Mr Jacobs has been stalking Shaklee since late last year, forming an investor group which now holds a 9.7 per cent stake in the San Francisco-based company.

Yamanouchi is offering $28 a share cash but shareholders (as recorded on March 19) will also receive Shaklee's previously announced $20 a share special dividend, thus topping Mr Jacob's offer by $8 a share. The stock rose $9¼ to $47¾ in brisk trading on the New York Stock Exchange.

Last month Yamanouchi paid $350m for the 78 per cent stake in Shaklee Japan owned by its US parent. The rest of the shares in the Japanese health food and consumer products company are held by banks, business contacts and others who bought them when they were floated in Tokyo in July, 1986.

Shaklee sells vitamin supplements, nutritional products, personal care and household products direct to US homes through a large self-employed salesforce. Its net profit rose 16 per cent last year to $27.2m on sales ahead nearly 10 per cent at $627.5m.

The Shaklee salesforce would be the wrong type of organisation to sell Yamanouchi'e drugs to doctors and pharmacists in the US, but it fits in with the Japanese company's wider interests. In its home market Yamanouchi is expanding rapidly from prescription drugs into consumer products, a move bolstered by its buy-out of Shaklee's Japanese subsidiary.

Yamanouchi's purchases of Shaklee's operations in the two countries are "central to its broader concept of health care," said Mr Samuel Isaly, an analyst with S.G. Warburg in New York.

The US acquisition was typical of the active international strategy being pursued by Mr Shigeo Morioka, Yamanouchi's chief executive.

General Mills rises to $82.3m

GENERAL MILLS, the US foods and restaurants group, lifted third-quarter earnings to $82.3m or $1 a share, from $71.4m or 83 cents a share a year ago on sales ahead to $1.46bn from $1.24bn last time.

The group's directors attributed the advance to the strengths of Big G cereals and Red Lobster and Olive Garden restaurants.

Alfonsin pursues part-sale of Aerolineas

By Gary Mead in Buenos Aires

PRESIDENT Raul Alfonsin has reiterated Argentina's commitment to sell off part of its national airline, Aerolineas Argentinas, despite the collapse of an attempt last year.

At a meeting with Radical party senators and Mr Rodolfo Terragno, Minister of Public Works, he said Argentina had an agreement with Scandinavian Airline Systems. "We have started it and we must finish it," he added.

Under the terms of the deal discussed with SAS last year, the Scandinavian company was to purchase 40 per cent of Aerolineas, but the opposition Peronists accused the Government of mishandling the deal and vowed to oppose legislation to facilitate the sale.

Mr Terragno withdrew his Aerolineas bill on December 15 last year. He later introduced a bill under which the part-sale of Aerolineas would be achieved by calling for international tender. That legislation is awaiting Senate approval, but two different bills have been introduced by Mr Carlos Tenev, a Peronist senator.

Under Mr Tenev's Aerolineas bill, 51 per cent of the company would remain in the state's hands; 25 per cent would go to another airline company; 14 per cent would be sold as shares on Argentina's stock exchange; and 10 per cent would be given to Aerolineas staff.

Management buy-out at Aetna Life subsidiary

AETNA LIFE & Casualty, the largest investor-owned insurance enterprise in the US, is to sell its Federated Investors subsidiary to the unit'e management for $345m reports Our Financial Staff.

Federated is an investment manager serving financial institutions, with $38bn under management.

It will receive about $320m in cash and about $25m in Aetna's common stock currently held by Federated's management.

It will also receive preferred stock convertible in whole or in part into 27.5 per cent of the new company's common stock. Aetna will also retain about $80m in cash, receivables and marketable securities from Federated and related operations.

Aetna, which provides almost all forms of business and personal insurance and pension products, said the proceeds would be used for general corporate purposes, including possible use in its stock repurchase programme, announced last July.

INTERNATIONAL COMPANIES AND FINANCE

Australian group digs deeper into Canada

Robert Gibbens looks at plans by Elders to purchase 75% of Quebec Cartier Mining

THE AUSTRALIANS are buying another piece of Canada – this time in a remote region of the Lower St Lawrence North Shore, about 700 miles north-east of Montreal.

The Melbourne-based Elders group, through a North American resource subsidiary, plans to buy 75 per cent of Quebec Cartier Mining (QCM), now the country's largest iron-ore producer, from USX of Pittsburgh, parent of US Steel.

USX has been shedding assets for several years, sizing down its steel operation and putting more emphasis on its Marathon Oil subsidiary. QCM, set up some 30 years ago to develop part of the immense iron-ore resources of tha Quebec-Labrador Trough, has been on the block for some time.

QCM has assets worth around C$2bn (US$1.7bn), with e replacement value double that, including the Mount Wright mine and concentrator with a capacity of nearly 20m tonnes a year of concentrates, a 200-mile railway to transport the ore to Port Cartier, an all-year port on the St Lawrence and a pelletising plant nearby with 8m tonnes capacity.

In the 1970s and early 1980s three principal companies mining and processing Quebec-Labrador iron ore – QCM, Iron Ore Co of Canada, and Wabush Mines – came under sharp competitive pressure from new mines in Western Australia and more recently from the buge new high-grade Brazilian mines.

In the first half of the 1980s, the high US dollar and the decline of the American steel industry brought matters to a crisis.

The result was the demise in 1984 of Sidbec-Normines, which was to produce pellets for a Scottish steel plant that was never built. IOC, owned by several US steel companies, shut its most costly operations, while QCM bought the Sidbec pellet plant to link with its Mount Wright mining operation.

Wabush, controlled by Stelco and Dofasco, Canada's two largest steelmakers, cut costs but were able to ride out the storm.

Quebec-Labrador, with 60m tonnes capacity before the 1973 energy crisis and one of the world's most important iron-ore eources, underwent a reduction to about 40m tonnes and the loss of several thousand jobs.

The turnabout began in 1986, after a drop in the US dollar helped to revive the US steel industry. Rationelisetion meant the three surviving producers, with lower-cost mines and products more attuned to Europe and the world market, could operate at near capacity and show modest profits.

The trend continued through 1988. USX appears to be selling QCM at somewhere near the top. But Elders must regard the price and conditious as attractive, so that QCM could compete against Brazil.

USX has already signed a deal to sell 25 per cent of QCM to Dofasco, which is already a minority holder in Wabush and IOC. Dofasco will take 2m tonnes of pellets from QCM each year.

Elders last year bought Carling O'Keefe, Canada's third largest brewer, and is merging its operatious with those of Molson, the number two producer. Several other Australian companies have moved into Canada and New Zealand's Fletcher Challenge has put together one of the country'e largest forest products groups.

Director who criticised BNZ privatisation dismissed

By Dai Hayward in Wellington

MR ROB CAMPBELL, outspoken critic of the Government's handling of the sale of Bank of New Zealand, has been dismissed as a director of the bank.

This follows his resignation a few weeks ago as acting chairman after learning he was being passed over for the position of either chairman or deputy chairman. It comes as the Government is poised to announce its plans for BNZ in a statement due today.

Mr Campbell has strongly opposed the sale of BNZ to an overseas owner and claims the whole sale process should go on hold until the bank has recovered from its current problems caused by bad debts of almost $NZ600m (US$370.8m), incurred since the 1987 stock market crash.

Mr Campbell confirmed yesterday he had received his dismissal in a letter from the Government, although no official announcement has yet been made. Mr David Lange, the Prime Minister, had warned there was a price to pay for those who protest too loudly.

It is believed the Government may have decided to postpone selling BNZ outright. National Australia Bank has revived its interest in buying BNZ and was asking to examine the books in depth.

MPs echoed many observers opposed to the privatisation at a time when it would be almost a fire sale. Mr Lange is believed to have taken heed of opposition in his own party, despite the desire of Mr David Caygill, Finance Minister, for a sale as quickly as possible.

An order-in-council expected today could, however, open up the sale of shareholdings to large institutions. This would give the bank some much-needed equity.

Mr Campbell said it was ironic that the Government now appeared to be accepting the advice offered by himself and Sir Ron Brierley, the former chairman, and that the board was following the policy they had advocated, while both had now left as directors.

Profits lifted by economic upturn in Malaysia

By Our Financial Staff

MALAYSIAN companies have been reporting generally improved profitability as a result of a better economic environment and higher commodity prices.

Genting, a gambling and resorts group, also involved in property and plantations, lifted group pre-tax profit 31 per cent to 219.8m ringgit (US$80m) for 1988. Turnover rose 19 per cent to 480.7m ringgit.

Commodity-based Guthrie Ropel boosted its pre-tax profits by nearly 2¼ times to 36.3m ringgit for last year from 14.8m ringgit. Sales were 27.6 per cent higher at 97.9m ringgit.

The company, which lifted its total dividend to 20 cents a share from 14 cents, said it expected a similar earnings performance this year.

However, Malayan Banking ehowed flat interim profits from its operations as lending margins narrowed in a more competitive environment. It expects a similar outcome for the year as a whole.

Sun Hung Kai hit by fall in market activity

By Michael Marray in Hong Kong

SUN HUNG KAI and Co, the Hong Kong financial services group which runs one of the territory's biggest brokerages, has reported net profits of HK$120.8m (US$15.5m) for 1988, down from HK$145.8m, reflecting a year of quieter activity on stock and futures markets.

Extraordinary profits amounted to another HK$35.4m for the year, against a previous HK$34.5m.

Sun Hung Kai said it had adopted a cautious policy during the period, in order to preserve its capital and operating base for better times. Prospects for 1989 look favourable, it added.

Turnover on the Hong Kong stock market averaged HK$800m daily in 1988, but so far this year has been running at around HK$1.5bn.

In 1987 the company made profits amounting to HK$133.7m for the first half, but later made substantial provisions for doubtful loans in the wake of the October crash.

Sun Hung Kai recently emerged as a partner in one of four consortia competing for the franchise to build and operate a cable television network in Hong Kong.

Its partners include property giants New World Development, Henderson Land and Hang Lung Development, but the consortium faces stiff competition, particularly from two other groups linked to local tycoons Mr Li Kashing and Sir Y.K. Pao.

Kymmene rights to raise FM740m

KYMMENE, Finland's leading forest products group, plans to raise FM740m ($171m) through a one-for-10 rights issue and a targeted share issue to employees, writes Olli Virtanen in Helsinki. The rights issue will consist of 6.75m shares at FM80 each. Shareholders will also be offered a one-for-10 scrip issue.

FT GUIDE TO WORLD CURRENCIES

The table below gives the latest available rates of exchange (rounded) against four key currencies on Monday March 13, 1989. In some cases the rate is nominal. Market rates are the average of buying and selling rates except where they are shown to be otherwise. In some cases market rates have been calculated from those of foreign currencies to which they are tied.

COUNTRY	£ STG	US $	D-MARK	YEN (X 100)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Special Drawing Rights March 10,1989 United Kingdom £0.768499 United States $1.31034 Germany West D Mark 2.43356 Japan Yen169.034. European Currency Unit Rates March 13, 1989 United Kingdom £0.649738 United States $1.11625 Germany West D Mark 2.08181 Japan Yen144.979

Abbreviations: (a) Free rate; (b) Banknote rate; (c) Commercial rate; (d) Controlled rate; (e) Essential imports; (f) Financial rate; (h) Exports; (i) Non commercial rate; (j) Business rate; (k) Buying rate; (l) Luxury goods; (m) Market rate; (o) Official rate; (p) preferential rate; (q) convertible rate; (r) parallel rate; (s) Selling rate; (t) Tourist rate; Some data supplied by Bank of America, Economics Department, London Trading Centre. Enquiries: 01 634 4360/5. Monday March 13, 1989. Ugandan Shillings devalued by 17.5% on March 6.

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INTERNATIONAL CAPITAL MARKETS

US Treasuries subdued in lull before economic data

By Janet Bush in New York and Norma Cohen in London

US TREASURY bonds yesterday traded quietly and little changed from their closing levels on Friday at the start of a week which sees several economic releases.

In late trading, prices were quoted unchanged to marginally lower, giving up small early gains. The Treasury's benchmark long bond stood ⅛ point lower for a yield of 9.14 per cent.

The mood was subdued as the market continued to be concerned about last Friday's stronger than expected employment figures and what they say about the strength of the economy and the prospects for a further tightening in monetary policy.

With inflation at the top of everyone's list of concerns, the key statistic due out this week is likely to be Friday's producer prices figures for February's producer prices index.

The market will have to digest retail sales data today, and January trade figures on Wednesday.

UK GOVERNMENT bond prices closed up to ⅛ lower, with yields rising in response to February retail sales data that were far stronger than analysts had expected. While

GOVERNMENT BONDS

UK producer prices, also released yesterday, were in line with expectations, the data overall confirmed the view that interest rates will have to stay firm for the time being.

Dealers said the drop in gilts prices would likely have been steeper had the Bank of England not emerged as a buyer of stock. Still, traders said activity was limited to position squaring ahead of the Chancellor's budget address today.

IN TOKYO, Japanese government bond (JGB) yields rose sharply, partly in a belated reaction to last Friday's US employment data. The data caused the yen to fall against the dollar, sparking selling of JGBs. The benchmark 111 bond yields rose seven basis points to trade at 5.24 per cent.

Also, dealers noted that other short-term rates in Japan have been rising, partly in response to the normal seasonal pressures that accompany the fiscal year end on March 31. Three-month bank CD's gained another three basis points yesterday to yield 4.75 per cent. But analysts speculate that Japanese authorities are gradually allowing short-term interest rates.

IN WEST GERMANY, government bond prices fell as much as 60 pfennigs, partly reflecting local election results eroding support for Chancellor Helmut Kohl's Christian Democratic party.

The price declines were also a belated response to Friday's US jobs report which caused the dollar to rise and the D-Mark to fall. The new Federal Government 7 per cent 10-year bond was fixed to yield 6.98 per cent yesterday against 6.90 on Friday.

Dealers are anxious ahead of today's repurchase agreement tender which could come in either fixed- or floating-rate form. The form is expected to reflect the Bundesbank's view of whether higher short term rates are needed.

BENCHMARK GOVERNMENT BONDS

	Coupon	Red Date	Price	Change	Yield	Week ago	Month ago
UK GILTS	13.500	9/92	108-12	-3/32	10.59	10.48	10.30
	9.750	1/98	98-20	-3/32	9.96	9.96	9.72
	9.000	10/08	99-14	+1/32	9.06	9.01	8.98
US TREASURY *	8.875	02/99	97-00	-16/32	9.34	9.29	9.20
	8.875	02/19	98-14	-27/32	9.14	9.10	9.06
JAPAN No 111	4.600	6/98	96.0357	-0.391	5.24	5.16	4.91
No 2	5.700	3/07	108.3944	+0.100	5.03	5.00	4.83
GERMANY	6.375	11/98	95.7500	-0.300	7.01	6.89	6.79
FRANCE BTAN	8.000	1/94	94.9731	-0.017	9.32	9.22	8.98
OAT	8.125	5/99	93.3400	-0.050	9.14	9.04	8.82
CANADA *	10.250	12/98	98.3000	-0.600	10.58	10.43	10.22
NETHERLANDS	8.7500	10/98	97.2250	-0.400	7.23	7.10	6.97
AUSTRALIA	12.000	7/99	90.9164	-0.127	13.85	13.54	13.83

London closing, *denotes New York closing
Yields: Local market standard
Prices: US, UK in 32nds., others in decimal

Technical Data/ATLAS Price Sources

FT INTERNATIONAL BOND SERVICE

Listed are the latest international bonds for which there is an adequate secondary market.

Closing prices on March 13

US DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Abbey National 7½ 92	200	†92⅝	93⅛	0	0	10.43
B.F.C.E. 7 92	150	91⅞	92¼	-0¼	-0⅛	10.17
B.F.C.E. 9⅛ 95	100	96⅜	96⅞	-0½	-0½	10.00
Brit. Tel. Fin. 9⅞ 98	250	96⅜	96⅞	-0⅛	-0⅜	9.92
Canada 9 96	1000	96⅛	96⅝	-0⅜	-0⅜	9.74
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Belgium 4⅝ 91	50	98⅛	98⅝	—	—	5.12
Canada 6⅛ 91	80	101⅜	102⅛	—	—	5.01
Canada 5⅝ 93	80	101⅜	102⅛	—	—	5.09
Elec. De France 5⅝ 91	20	101	101⅞	—	—	5.16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

Soviet Union taps market in second D-Mark deal

By Andrew Freeman

THE SOVIET UNION tapped the D-Mark sector of the Eurobond markets for the second time when a DM750m deal was launched for the Bank for Foreign Economic Affairs of the USSR, known as Vneshecombank. It is the third time the Soviet Union has borrowed on the international public capital markets since it embarked on a borrowing programme in January last year.

The seven-year bonds, non-callable and with a 7 per cent coupon, were priced at 100¼. Three West German banks, Commerzbank, Dresdner Bank and Westdeutsche Landesbank, joined Deutsche Bank as co-lead managers.

Traders commented that yesterday was the wrong day to launch such a large deal because lack of investor demand was compounded by the mildly negative impact of the recent local election results in Germany. The bonds were quoted in the market at around less 3 bid, outside underwriting fees of 2¼ per cent.

At that level, however, the bonds yielded 7.52 per cent, well above recent domestic issues which yield under 7 per cent. Retail interest is expected to soak up the paper over the next few sessions. The previous Soviet D-Mark deal came under pressure and dropped by 1½ points to 95.15.

Elsewhere, Nomura International was the lead manager of an Ecu50m deal for PKbanken. The two-year bonds carry a 9⅛ per cent coupon and were priced at 101⅝ to offer a competitive yield against other recent two-year new issues.

A Nomura official said the bonds had met demand from European and Japanese investors, and said the paper was bid at 100, a discount equivalent to full fees of 1⅝ per cent. The proceeds were swapped into floating-rate Ecu.

INTERNATIONAL BONDS

By contrast, Morgan Stanley brought an Ecu40m one-year deal for the Council of Europe which carried a 14 per cent coupon and an option allowing the borrower to redeem in either Ecu or US dollars at a rate fixed on yesterday's spot rate of $1.116 per Ecu. Last week an issue for Kredietbank carried a similar option.

The bonds were aimed at retail investors prepared to take the currency risk in return for the coupon. A typical coupon for similar paper without the currency play would be around 9 per cent.

Merrill Lynch International launched an A$30m currency-linked issue for the Swedish Export Credit (SEK) which shattered recent records for the highest coupon offered in the sector. The two-year bonds with a 30 per cent coupon were priced at par. SEK has an option to redeem in either Australian dollars or yen.

The lead manager had identified demand before launching the deal and said it had sold bonds to sophisticated retail investors. It quoted the bonds at less 2 bid, on underwriting fees of 2 per cent. The proceeds were swapped into floating-rate US dollars.

In Switzerland yesterday, a two-tranche new issue totalling SFr130m for Megal Finance (Cayman Islands) had a slow reception amid poor market sentiment. The lead manager, Banque Paribas Suisse, is understood to have been supporting both tranches.

Swiss Bank Corporation requested all Swiss stock exchanges to suspend trading in a SFr100m issue for HCA Finance which it brought to the market in February 1988. An SBC official said the suspension was intended to protect bond holders until the outcome of shareholder discussions of proposals for a management buy-out and reorganisation of the guarantor company, Hospital Corporation of America.

The bonds, in which there is a very thin market, traded on Friday at 87, having recently been quoted as low as 80.

NEW INTERNATIONAL BOND ISSUES

Borrower	Amount m.	Coupon %	Price	Maturity	Fees	Book runner
D-MARKS						
Bk for Foreign Ec.Aff.USSR◆	750	7	100¼	1996	2¼/1½	Deutsche Bank
SWISS FRANCS						
Megal Finance Co.★★◆	65	5½	100⅝	1993	n/a	Banque Paribas (Suisse)
Megal Finance Co.★★◆	65	5⅝	101	1994	n/a	Banque Paribas (Suisse)
AUSTRALIAN DOLLARS						
Swedish Export Credit(a)◆	30	30	100	1991	2/1⅜	Merrill Lynch
ECUs						
Pkbanken(b)◆	50	9⅛	101⅝	1991	1⅝/⅝	Nomura Int.
Council of Europe(c)◆	40	14	101¾	1990	1/⅝	Morgan Stanley Int.
YEN						
C. Itoh Fin. (Europe)(b)◆	5bn	7½	111	1993	1⅝/1⅛	New Japan Secs (Europe)
Christiania Bank(d)◆	2.5bn	7½	101⅝	1993	1⅝	Drexel Burnham Lambert
US DOLLARS						
Asahi Glass Co.(e)‡◆	400	4⅛	100	1993	2¼/1½	Yamaichi Int. (Europe)
Asahi Glass Co.(e)‡◆	200	4⅛	100	1993	2¼/1½	Singapore Nomura
Nachi-Fujikoshi Corp.(e)‡◆	150	4¼	100	1993	2¼/1½	Yamaichi Int. (Europe)
Nippon Thompson Co.(f)‡◆	100	4⅜	100	1993	2¼/1½	NKK Europe
GUILDERS						
Honda Motor Co.(g)‡◆	400	1	100	1993	2⅛/1⅝	Amro Bank
Asahi Glass Co.(g)‡◆	200	1	100	1993	2⅛/1⅝	Amro Bank

★★Private placement. §Convertible. ‡With equity warrants. ◆Final terms. a) Redemption linked to A$/Yen spot exchange rate 5 days before maturity. b) Non-callable. c) Borrower can redeem in either Ecu or US$. d) Unlisted public issue. Redemption linked to Nikkei stock index. Put and call March 1992. e) Coupon cut by ⅜% from indication. f) Coupon cut by ¼% from indication. g) Coupon cut by ⅝% from indication.

Japan sets out to dismantle the fire wall

Stefan Wagstyl on proposals to widen competition within the securities industry

The bitter argument between Japanese banks and securities companies over access to each other's territory could well to come to some sort of head in the next few months.

The banks will be making the running – pressing for changes to rules which keep them out of the vast and lucrative domestic securities markets. The securities companies will be fighting to maintain a very profitable status quo.

After some five years of piecemeal deregulation, in which the business area of each side has steadily been widened by tit-for-tat negotiation, the Japanese authorities have reached the point at which compromises have become increasingly difficult to reach.

On Friday, the Japanese Ministry of Finance signalled that it now wants more fundamental changes in the way financial companies operate. It is prepared to contemplate what was once unthinkable – the dismantling of Japan's post-war financial system in which different kinds of financial companies are kept strictly separate.

The ministry's wishes were transmitted in a one-page document outlining five options for breaking down these barriers.

One is to continue with piecemeal reform; another to allow the establishment of universal banks on West German lines. A third is to permit financial groups to establish separate subsidiaries, one each for each kind of financial activity; option four is to allow the creation of holding companies and permit them to have various financial subsidiaries; the fifth choice is to allow the creation of investment banking subsidiaries, which could enter a wide range of securities and securities-related fields.

The brief report will be considered by a committee of the Financial Systems Research Council, an advisory body which includes representatives of financial companies. The committee is expected to select one or two of the ministry's options by the end of May. Mr Tasuo Murayama, the Finance Minister, will then decide how and when the plans would be put into effect. Changes in legislation would probably not be enacted before next year at the earliest.

On the face of it, the ministry is leaving all its options open. The document summarises the proposals which banks, securities companies and others have submitted to the research council, during soundings over the past year.

But in reality, the ministry knows that at least two of its options are non-starters. Universal banking is the preferred choice of most commercial banks, because it would allow them to go unhindered into the securities field. But precisely because it gives banks everything they want, the ministry would be hard put to convince securities companies to accept the idea.

The banks' case would be greatly strengthened if the Glass-Steagall Act, which separates banking and broking in the US, were repealed.

Japan has borrowed so much from the US in its reform of financial markets that the banks could make out a good case for the abolition of article 65 of the Securities and Exchange Act, which is modelled on Glass-Steagall. Nevertheless, even then the securities companies would fight tooth and nail to keep what they call a "fire wall" between banking and broking.

Among the Finance Ministry's other options, the creation of holding companies would also be fraught with difficulty. During the US occupation of Japan, anti-monopoly laws were passed to dismantle pre-war Japanese holding companies known as *zaibatsu*, which had dominated industry. Amending the anti-*zaibatsu* legislation would be too controversial to contemplate.

Establishing multi-subsidiary financial companies active in several areas through separate affiliates would be less explosive but extremely complex. Moreover, if the subsidiaries were properly segregated, then the present system would be perpetuated under a different form.

This leaves further piecemeal reform, or the investment bank option, which is widely seen as the ministry's favoured option. Under this scheme, banks and brokers – as well as other kinds of company such as life insurance groups – would be allowed to establish investment banking subsidiaries.

The system would be similar to one created in 1987 in Canada. The investment banking subsidiaries would be allowed to deal in a broad range of securities-related activities including underwriting and dealing in corporate bonds and equities, foreign exchange dealing, and investment management.

The list is long enough to whet the appetite of the banks and make securities companies blanch. But it stands a chance of success because the Finance Ministry would be prepared to limit the investment banking subsidiaries to corporate and institutional clients. This would maintain the securities companies' monopoly in the area which they feel most vulnerable – retail broking. They say that banks with their large branch networks would monopolise retail broking if given a free rein.

Securities companies will from the outset oppose the plan. The Japanese Conference for Securities Associations said in a report that the revitalisation of banking and broking had already been fully achieved in Japan without the need of institutional changes. But if enough pressure is brought to bear, the securities companies may be forced to accept the liberalisation of wholesale investment banking.

One factor weighing in the securities companies' calculation will be foreign attitudes. In their expansion overseas, Japanese companies have run increasingly into political as well as commercial obstacles – such as the reluctance of the US authorities to grant freely primary dealer status in the US Government bond market.

There are fears in Japan that the planned economic integration of the European Community in 1992 might lead to more restrictions being placed on non-European companies. The EC has backed the principle of reciprocity, whereby non-European companies, which come from countries which restrict the activities of European companies, might face restrictions in Europe.

Another consideration for securities companies is a steady growth in complaints about the way an oligopoly of four securities companies – Nomura, Daiwa, Nikko and Yamaichi – dominates the equity market. Life insurance companies, among others, would be keen to handle more of their own securities transactions.

But opposition from securities companies is not the end of the story. The banks themselves are divided between long-term credit banks, which serve corporate clients almost exclusively, and other commercial banks, which have company and retail customers. The long-term credit banks argue that their existing expertise in corporate finance means that they should get special treatment.

Commercial banks say this would mean replacing old restrictions with new. Meanwhile, trust banks, like securities companies, are opposed to desegregation in principle. They want to maintain a lucrative monopoly of trust fund management, which under the ministry's plan might be opened to others.

In the face of all this argument the easy option might be to continue with piecemeal deregulation. But the ministry thinks this will lead to increasingly unwieldy rules. It is happening already. For example, IBJ International, the London-based securities affiliate of the Industrial Bank of Japan, was earlier this year allowed to start trading Japanese equities in London – as long as it does not deal with Japanese clients.

The Finance Ministry says: "Until now we have always worked from the past. Now we have a concrete plan for looking into the future."

Nippon Life doubles holding in Daika

NIPPON Life Insurance, *Japan's biggest life insurance group*, is set to become the main shareholder in Daika Securities. It plans to double its stake in the unlisted securities company to 10 per cent, reports Reuter.

Daika's outstanding assets totalled Y5,100bn ($39bn) the end of 1988. This compares with more than Y20,000bn at the end of January 1989 for Nippon Life, which hopes through the deal to broaden its business into new finance-related areas.

Norway on course for further liberalisation of bond trading

MR GUNNAR BERGE, the Norwegian Finance Minister, expects further financial deregulation in line with a recent official report that recommended opening the Oslo bond market to foreigners, writes Our Financial Staff.

"I expect a further liberalisation in relation to the current rules, but I cannot say when it might happen," Mr Berge told a seminar. His remarks were the first official indication that the Government is likely to open the Norwegian capital market to non-residents.

Earlier the Government said it expected to respond to the Kleppe Report's recommendations by May this year. The Kleppe Report was published last month.

The government-appointed committee, headed by former Finance Minister Mr Per Kleppe, recommended that Norway should scrap currency regulations before the European Community's planned internal market comes into being by 1992.

Norway has already begun cautious deregulation to bring it more into line with the rest of Europe. These regulations include a ban on foreigners trading bonds.

Oslo bonds have traded quietly of late despite the weakness of the economy and the gradual reduction in marker rates by the central bank.

If foreign investors are to be allowed direct access, they could find long term yields attractive given the way recession has reduced Norwegian inflation to close to 4 per cent at the latest count.

FT-ACTUARIES SHARE INDICES

These Indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

EQUITY GROUPS & SUB-SECTIONS (Figures in parentheses show number of stocks per section)	Monday March 13 1989 Index No.	Day's Change %	Est. Earnings Yield% (Max.)	Gross Div. Yield% (Act at (25%)	Est. P/E Ratio (Net)	xd adj. 1989 to date	Fri Mar 10 Index No.	Thu Mar 9 Index No.	Wed Mar 8 Index No.	Year ago (approx) Index No.
1 CAPITAL GOODS (207)	966.17	+0.8	9.83	3.76	12.46	3.85	958.38	958.73	951.86	772.31
2 Building Materials (28)	1220.60	+1.0	10.43	3.74	11.80	0.98	1208.24	1201.33	1206.95	1025.54
3 Contracting, Construction (38)	1781.70	+1.0	11.27	3.46	11.56	4.49	1764.07	1751.26	1759.35	1573.17
4 Electricals (10)	2842.96	+1.1	8.09	4.18	14.72	1.47	2811.85	2784.45	2808.86	2184.60
5 Electronics (30)	2199.01	+0.7	8.59	3.03	15.09	12.07	2183.73	2153.91	2129.56	1567.23
6 Mechanical Engineering (55)	514.96	+0.7	9.43	3.74	12.89	1.15	511.46	509.17	512.88	482.79
8 Metals and Metal Forming (7)	546.76	+1.2	14.03	5.39	8.05	0.00	540.54	537.40	539.97	459.58
9 Motors (17)	317.37	-0.9	11.21	4.55	10.42	3.23	320.17	318.84	320.69	289.99
10 Other Industrial Materials (22)	1596.86	+1.3	8.62	3.95	13.76	4.62	1575.62	1561.66	1566.78	1278.38
21 CONSUMER GROUP (186)	1196.00	+1.0	8.63	3.55	14.53	3.84	1184.86	1177.71	1183.56	1073.26
22 Brewers and Distillers (22)	1351.63	+1.1	9.23	3.29	13.69	5.20	1337.09	1334.81	1338.70	1063.47
25 Food Manufacturing (20)	1046.71	+0.7	8.86	3.81	14.12	5.62	1039.45	1039.94	1046.83	845.29
26 Food Retailing (15)	2007.18	+0.4	9.04	3.50	14.57	8.25	1998.63	1991.83	2008.11	2138.40
27 Health and Household (13)	2182.99	+2.1	6.22	2.52	18.39	0.59	2138.81	2129.97	2134.85	1983.39
29 Leisure (33)	1654.53	+1.4	7.25	3.22	17.34	22.33	1631.84	1623.87	1632.37	1268.51
31 Packaging & Paper (17)	682.26	+0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
32 Publishing & Printing (18)	3788.34	+0.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
34 Stores (33)	777.75	+0.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
35 Textiles (15)	523.86	+0.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
40 OTHER GROUPS (94)	1095.53	+1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
41 Agencies (18)	1324.80	+0.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
42 Chemicals (22)	1286.83	+0.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
43 Conglomerates (11)	1533.82	+0.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
45 Shipping and Transport (13)	2408.62	+1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
47 Telephone Networks (2)	1178.45	+1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
48 Miscellaneous (20)	1586.82	+0.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
49 INDUSTRIAL GROUP (487)	1150.89	+0.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
51 Oil & Gas (13)	1950.83	+0.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
59 500 SHARE INDEX (500)	1201.05	+0.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
61 FINANCIAL GROUP (126)	750.56	+0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
62 Banks (8)	737.91	-0.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
65 Insurance (Life) (8)	1041.35	-0.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
66 Insurance (Composite) (7)	594.43	-0.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
67 Insurance (Brokers) (7)	994.55	-2.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
68 Merchant Banks (11)	346.81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
69 Property (53)	1345.69	+1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
70 Other Financial (32)	385.34	+0.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
71 Investment Trusts (73)	1106.71	+0.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
81 Mining Finance (2)	486.92	+0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
91 Overseas Traders (8)	1388.81	+0.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
99 ALL-SHARE INDEX (709)	1091.27	+0.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

	Index No.	Day's Change	Day's High (a)	Day's Low (b)	Mar 10	Mar 9	Mar 8	Mar 7	Mar 6	Year ago
FT-SE 100 SHARE INDEX♦	2103.0	+17.8	2103.0	2081.2	2085.2	2075.9	2083.3	2083.5	2072.6	1839.5

FIXED INTEREST

PRICE INDICES	Mon Mar 13	Day's change %	Fri Mar 10	xd adj. today	xd adj. 1989 to date
British Government					
1 5 years	118.33	-0.02	118.47	0.12	2.84
2 5-15 years	135.87	-0.07	135.97	–	2.32
3 Over 15 years	147.50	-0.15	148.51	0.79	3.99
4 Irredeemables	176.82	-0.08	176.97	–	1.51
5 All stocks	132.97	-0.06	133.19	0.14	2.73
Index-Linked					
6 5 years	132.78	–	132.77	–	1.36
7 Over 5 years	134.90	+0.15	134.31	–	0.95
8 All stocks	134.31	+0.14	134.12	–	0.95
9 Debentures & Loans	117.96	+0.18	117.99	0.24	2.14
10 Preference	89.78	+0.24	90.12	0.56	1.12

AVERAGE GROSS REDEMPTION YIELDS		Mon Mar 13	Fri Mar 10	Year ago (approx.)
British Government				
1 Low Coupons	5 years	9.28	9.17	8.79
2	15 years	8.97	8.95	9.05
3	25 years	8.84	8.83	8.87
4 Medium Coupons	5 years	10.34	10.32	9.14
5	15 years	9.43	9.41	9.48
6	25 years	9.00	8.98	8.99
7 High Coupons	5 years	10.46	10.45	9.25
8	15 years	9.65	9.62	9.59
9	25 years	9.19	9.17	9.04
10 Irredeemables		8.78	8.78	8.97
Index-Linked				
11 Inflation rate 5%	5yrs.	3.28	3.28	2.45
12 Inflation rate 5%	Over 5 yrs.	3.44	3.45	3.82
13 Inflation rate 10%	5yrs.	2.45	2.44	1.58
14 Inflation rate 10%	Over 5 yrs.	3.29	3.29	3.67
15 Debs & Loans	5 years	12.11	11.98	10.75
16	15 years	11.31	11.32	10.61
17	25 years	10.72	10.75	10.61
18 Preference		10.01	10.02	10.41

♦Opening index 2081.2; 10 am 2082.9; 11 am 2086.4; Noon 2084.6; 1 pm 2087.7; 2 pm 2088.3; 3 pm 2093.6; 4 pm 2100.0; 4.05 pm 2101.2 (a) 4.28pm (b) 9.00am † Flat yield. Highs and lows record, base dates, values and constituent changes are published in Saturday issues. A list of constituents is available from the Publishers, The Financial Times, Bracken House, Cannon Street, London EC4P 4BY, price 15p, by post 34p.

RISES AND FALLS YESTERDAY

	Rises	Falls	Same
British Funds	10	71	28
Corporations, Dominion and Foreign Bonds	0	5	38
Industrials	637	234	705
Financial and Properties	258	91	320
Oils	30	21	48
Plantations	0	4	8
Mines	60	34	90
Others	66	65	112
Totals	1,063	525	1,349

LONDON RECENT ISSUES

EQUITIES

[illegible]

FIXED INTEREST STOCKS

[illegible]

RIGHTS OFFERS

[illegible]

TRADITIONAL OPTIONS

- First Dealings Mar 6
- Last Dealings Mar 31
- Last Declarations Jun 15
- For settlement Jun 28

For rate indications see end of London Share Service

Calls in Dixons, TV AM, J Wilkes, Barbican, Coca Tora, Black Lole, Racal, Ryans Hotel, Conroy Pet, INOCO, Stormgard, Platignum, Bristol Channel, Eagle Trust, Portland, NSM, Hyman, P&O Wrwts,Amal Fin, Spong, Medirace, TR Energy, Bella Mining, Blanc, Control Secs, Astral Hidge, Norfolk Cap, Delta Gold. Put Conroy Pet.

LONDON TRADED OPTIONS

DIXONS, the high street electricals concern was again the leading light on the London Traded Options Market yesterday, attracting 2,031 contracts, consisting of 1,987 calls and only 44 puts. The most heavily traded series was the March 180 call, on 871 contracts, though the March 160 calls found 393, and the September 180s 111.

Overall market business was again at a relatively modest level, totalling 26,502, with calls coming to 20,142 and puts to 6,360, as the index itself approached UK Budget Day with a rise of 17.8 points to 2,103, the highest closing level seen since the Great Crash of October, 1987, as well as the day's highest, in spite of it being a heavy ex-dividend day.

There was again an upwards pull on the index arising from dealings on the London International Financial Futures Exchange — dealings on which showed a premium over fair value after allowing for such things as dividend and interest rate calculations.

Index trading on the options market made a better showing in percentage terms than has been seen of late, coming to 5,200 contracts, consisting of 2,961 calls and 2,239 puts — marginally re-establishing a balance on the call side.

Two stocks caught the eye for having all options business in them concentrated in the calls. Hanson, which found attention on the underlying market on a sale of a subsidiary for \$140m, and gained a little more ground in terms of its underlying share price — $2\frac{3}{4}$p to $184\frac{1}{2}$p — attracted 1,743 call contracts, and no puts. Pilkington, which has been finding some attention in options trading of late, attracted 1,278 calls and no puts.

The Hanson dealings took a large share of their business from the March 180 calls, in which there were 643 contracts. Pilkington dealings included 995 contracts in the May 240 calls. British Steel saw 1,344 contracts traded, of which 1,228 were call, and only 58 put, with the July 90 calls attracting 710 contracts.

Option		CALLS Apr	Jul	Oct	PUTS Apr	Jul	Oct
Alld Lyons (*492)	460	39	52	65	4	13	17
	500	14	29	43	20	29	35
Brit. Airways (*207)	160	51	54	55	1	2	3
	180	32	35	38	$1\frac{1}{2}$	5	6
	200	14	21	20	4	10	14
Brit. Gas (*219)	200	24	29	–	$1\frac{1}{2}$	4	–
	220	9	19	24	7	13	16
	240	4	9	15	24	26	30

Option		CALLS Apr	Jul	Oct	PUTS Apr	Jul	Oct
Ultramar (*293)	280	–	42	52	–	18	24
	294	15	–	–	$15\frac{1}{2}$	–	–
	300	–	30	44	–	26	36
Woolworth (*262)	240	25	35	–	$1\frac{1}{2}$	6	–
	260	13	20	30	8	15	17
	280	6	13	20	20	27	29

Option		CALLS Mar	Jun	Sep	PUTS Mar	Jun	Sep
Barclays (*442)	420	23	40	53	$3\frac{1}{2}$	9	14
	460	$3\frac{1}{2}$	15	27	25	28	33
	500	1	5	12	63	63	63
Blue Circle (*546)	500	48	58	74	4	12	18
	550	13	30	44	14	30	36
	600	5	13	24	58	68	70

[illegible]

INTERNATIONAL DIRECT MARKETING

The Financial Times proposes to publish a Survey on the above on

18 April 1989

For a full editorial synopsis and advertisement details, please contact:

Neville Woodcock

on 01-248-8000 ext 3365 or write to him at:

Bracken House, 10 Cannon Street London EC4P 4BY.

FINANCIAL TIMES

UK COMPANY NEWS

Low & Bonar growth contained to 8%

By Maggie Urry

LOW & BONAR, the Dundee-based packaging, plastics and textile group, widened margins in each of its trading divisions in the year to end November 1988. But pre-tax profits growth, of 8 per cent to £22.2m, was held back by one-off-items.

Mr Roland Jarvis, group chief executive, said the last financial year marked a turning point for the group which had become more tightly focussed. The benefit of a £60m capital spending programme over the last three years was now beginning to be felt, he said.

During the year the electronics division was sold. Group sales from continuing businesses rose by 18.8 per cent to £282.4m, and operating profits were ahead by 26.4 per cent to £24m. A sharp rise to £1.7m (£875,000) in income from businesses in Africa helped trading profits from continuing operations to rise by 28.3 per cent to £25.9m.

However, there was a £4.4m adverse swing to a loss of £1.1m from the activities sold. The interest charge fell to £2.6m (£2.9m). The latest figures lacked a £1.7m benefit from a pension fund rebate in the previous year. Profits would have been £700,000 higher but for exchange rate moves, Mr Jarvis said.

Group pre-interest profit margins rose from 7.8 per cent to 8.9 per cent. Mr Jarvis said the group's aim was to reach 10 per cent, and this would be achieved in many parts of the business in the current year.

In the packaging division, which contributes 60 per cent of profits, pre-interest results were up by 28.1 per cent to £15.2m with margins rising from 7.1 per cent to 8 per cent. Mr Jarvis said both volumes and productivity increased, offsetting a 50 per cent increase in polymer prices.

Roland Jarvis – a turning point for the group

Profits for the plastics division rose by nearly two-fifths, with margins one percentage point higher at 9.6 per cent. The North American operation had suffered when production moved to a larger factory.

Textile profits rose by nearly a half, with margins ahead by 2 percentage points to 11.5 per cent. The group's Flotex brand carpet was now gaining acceptance in a number of markets, Mr Jarvis said, after years of development and investment.

He pointed out that the balance sheet was now strong with net gearing at 15 per cent, following the electronics sale. The capital expenditure programme would continue at £20m a year, funded out of internal cashflow, and there was scope to make acquisitions.

Earnings per share rose 6.8 per cent to 18.7p, after a slightly higher tax charge of 28 per cent. A 15.7 per cent rise in the final dividend to 4.8p, gives a total for the year of 7p (6p).

● COMMENT

Low & Bonar ought now to break out from its rather dull earnings trend of the past two years. At last it appears to be reaping the rewards of positioning itself in niche markets offering both growth and good margins. However, investors have too often been disappointed by the speed with which the group earns profits from its new products; Flotex, for example. Profits this year should reach £27½m but that is already reflected in the prospective p/e of a little over 11, on the shares down 9p to 258p, yesterday. The share price has been driven more by speculation about the 4.7 per cent stake held by Tomkins, the acquisitive conglomerate. If that dies down the price is likely to be dull until earnings growth is more apparent.

Helped by acquisitions British Vita improves 33% to £37.5m

By John Thornhill

BRITISH VITA, the Manchester-based polymer, fibre and foam group, increased profits by 33 per cent to £37.5m in the year to December 31, compared with £28.3m last time.

Turnover rose 67 per cent to £452.7m (£271.3m).

The company said the year had been dominated by two major features: a significant expansion in the group's size following acquisitions; and the impact of new regulations affecting the UK upholstered furniture market.

Metzeler, acquired from Bayer, the West German chemical company, in December 1987, and Royalite, based in Scotland and Italy, bought in the same month, made a "pleasing" contribution to the group. The two acquisitions now form an engineering thermoplastics division which complements the industrial polymer processing operations.

Since the year end, this division had been further strengthened through the acquisition of Esbjerg Thermoplast, of Denmark, for about £3m.

Vita also bought the ICOA group, based in Spain and France, with effect from July 1988, and Rossendale Combining (Holdings) of the UK for £3.5m in November.

New UK regulations concerning the fire resistance of upholstered furniture were outlined by the Government in January last year and came into effect last month.

Mr Bob McGee, chairman, said that they had presented a "significant challenge" to the company, but it had reacted quickly and introduced new products.

Earnings per share, adjusted for 1987 and 1988 capitalisation issues, advanced to 20p (16.7p). A final dividend of 3.7p is recommended, making 6.5p (4.58p adjusted) for the year.

Mr McGee, said the current year had started well and the company faced the future in confident mood.

● Comment

British Vita is highly admired, and after yesterday's results it is easy to see why. Strong organic growth, coupled with promising acquisitions, produced another fine set of results. Vita has made several shrewd moves in the acquisitions field and has not had to pay excessively for them. It is in the habit of buying relatively cheap underperforming companies, which so far have never had an exit p/e ratio of higher than 9. This means that it can sometimes take time to milk satisfactory profits from them, as is happening with Metzeler, but the companies eventually seem to succumb to Vita's earthy management approach. Vita has a strong presence on the Continent and further expansion may be in the offing. There are slight worries about its dependence on consumer-related industries, but a good geographical and product spread would help to insulate it from a slump. Pre-tax profits of £44m would give a prospective multiple of about 11. Vita stands at a modest premium to the market but looks good value.

Harding buys Maltdon

THE HARDING Group has agreed to pay a maximum of £420,000 for Hemel Hempstead based Maltdon, a distributor of industrial fasteners trading as Alted.

Under the acquisition agreement, £270,000 will be payable in cash in two instalments from the existing resources of the Harding group and the balance will be satisfied by one issue of 275,000 ordinary shares.

Water meters boost for ABB Kent as profits rise

By Andrew Hill

ABB Kent (Holdings), the flow meter manufacturer, increased pre-tax profits from £6.53m to £8.58m in the year to December 31, and expects privatisation of the 10 water authorities to lead to a boost in demand for its water meters.

Group turnover rose nearly 7 per cent to £130m (£122m) during the year, and earnings per share from 5p to 7p. ABB Kent is recommending a final dividend of 2p, making 3.5p (3p) for the year.

The sale of meters accounts for about 40 per cent of turnover at ABB Kent, which produces 3m units a year, mainly for the overseas market. Its results came the day after the announcement that all new homes in Southern Water Authority's area would be fitted with water meters from next month.

ABB Kent, formerly Brown Boveri Kent, is 55 per cent-owned by Asea Brown Boveri, the Swiss/Swedish engineering group formed by a merger in January 1988.

It already supplies meters to Southern and other UK water utilities involved in the Government's three-year trial of water metering, which begins on April 1.

Water authorities and companies will be unable to use rateable value, the traditional basis for water charges, beyond the end of the century, and have to consider metering, or alternatives such as licences.

Mr John Notley, ABB Kent's chief executive, said yesterday: "The installation of water meters in the UK is going to be a gradual process, but it's a very logical step: we're probably one of the few nations in the world that doesn't monitor its water production."

He said the group also expected to exploit the UK water industry market for its liquid analysis products.

The group's margins improved during 1988, following a poor performance in 1987 caused by adverse exchange rates and problems with the process control systems division, where losses were reduced last year. The valve and instrumentation divisions performed marginally better than in 1987, said Mr Notley.

Caird Group more than trebles to £1.7m

By Vanessa Houlder

CAIRD GROUP, the waste disposal company, more than tripled pre-tax profits from £466,280 to £1.7m in the six months to the end of 1988.

Turnover – which included the net surplus from sales of property – increased from £674,889 to £5.7m. The share price rose by 4p to 446p.

Mr Peter Linacre, chairman, said that tighter environmental controls in the UK would benefit the company.

Environmental services now account for three quarters of Caird's business. The bulk of last year's profits were derived from property activities.

In the half year, the bulk of the property portfolio was sold, realising £9.65m in cash and a profit of about £390,000. The net cash balance is at present about £3m.

Earnings per share more than doubled to 10.14p (4.58p). An interim dividend of 2.5p (1p) was paid.

Marina Dev drops plans for management buy-out

By David Waller

THE DIRECTORS of Marina Development Group, the marina company which recently escaped a takeover assault from Local London when Local London itself found itself on the receiving end of a bid, are no longer considering a management buy-out.

Mr David Heimann, MDG chairman, wrote to shareholders yesterday saying that the main purpose of the buy-out proposals had been to present shareholders with an attractive alternative to the Local London offer.

Mr Heimann said that the risk of the company being taken over "on the cheap" had been removed and it was appropriate to allow all shareholders to participate in the company's future.

MDG added that a US firm of marina consultants had valued the marina berths – which the company is starting to lease out – at between £117m and £128m. During the course of the bid, a UK firm of chartered surveyors valued the land, buildings and berths which make up the marinas at £73.6m.

At the time of Local London's bid, MDG was at an advanced stage in negotiations to conclude a major acquisition. Talks have now been re-opened.

Mr Heimann warned shareholders that the results for the year to the end of March would be affected by the costs of defending the bid. He expects the net asset value of the group to show a "substantial increase" over 1988.

The shares closed 7p down at 495p.

Ratcliffs stake sold

By Clare Pearson

BROMSGROVE Industries has sold almost all of its 21.87 per cent stake in Ratcliffs (Great Bridge) to Severn, the specially-formed company which last week announced a £12.54m agreed takeover of the West Midlands copper and brass strip manufacturer.

This gives Severn more than 75 per cent of the company's shares, when aggregated with irrevocable undertakings received from directors and the Ratcliffs family. Severn had left itself the option to declare the offer unconditional even if Bromsgrove did not accept.

Bromsgrove, a specialist engineering and financial services concern, sold its shares at the offer price of 250p per share. Its initial 11.62 per cent stake was acquired last year at 125¼p. It intends to pass on its residual 1.37 per cent stake in the company in due course.

Severn is headed by Mr Michael Hearn, current non-executive chairman and former chief executive of the Servis laundry appliances group.

Citygrove

Property developer Citygrove boosted profits to £5.54m for the year ended November 30 1988, compared with £2.18m, with turnover almost doubling from £34.27m to £63.10m.

The final dividend was 5p (2.5p) making 7.5p (4p) for the year, and earnings per share were shown as 30.05p (20.04p).

UK COMPANY NEWS

Thorn EMI sells Inmos to SGS-Thomson

By Terry Dodsworth, Industrial Editor

THORN EMI, the UK lighting and television rental group, is ending its expensive foray into semiconductor manufacturing with the disposal of its Inmos subsidiary to SGS-Thomson, the European company formed 18 months ago by SGS of Italy and Thomson of France.

The deal, under negotiation since the middle of last year, will cost Thorn $10m (£5.8m) in subscribing to a $100m SGS-Thomson (ST) rights issue. In return, the UK company will get a 10 per cent stake in ST, Europe's second largest semiconductor company after Philips of the Netherlands.

Thorn said yesterday it was limiting its exposure to further cash-calls from the Italian-French group through an agreement that puts a cap on its obligation to subscribe to future rights issues at $30m in total.

At the same time, the UK company will only be obliged to subscribe to issues to the extent that it has earned an equivalent amount through licensing revenues for patents it is retaining on a range of memory chips. If, for example, it has earned only $8m on these licences but is asked for $10m, it would only be required to meet the $8m figure.

Thorn believes it is likely to generate at least $30m from the licences over the next five years, and probably $10m to $20m more. A number of Japanese companies have shown an interest in the patents, which relate both to static random access memories (SRAMs) – an Inmos speciality – and dynamic random access memories (DRAMs). Thorn is also retaining "substantial" Inmos tax losses in the US.

Mr Mike Metcalf, Thorn's deputy finance director, said the deal would dilute earnings in tha next financial year because Inmos was currently earning profits. In the nine months to the end of December, the semiconductor group made $11.4m before interest and tax on sales of $91m.

Over the longer term, however, Thorn was faced with the question of further cash demands for upgrading the semiconductor company's product line and manufacturing facility in South Wales.

Thorn was also worried by the volatility of the semiconductor sector, where large profits can turn rapidly into equally large losses.

"We feel that Inmos is better placed as part of a specialist semiconductor group with powerful shareholders," Mr Metcalf said.

ST is owned jointly by Stet, the State-backed Italian telecommunications group, and Thomson, the nationalised French defence and consumer electronics group. The two parents contributed to a rights issue for the semiconductor company in January of last year and to a further $100m last September. Thorn'a $10m cash injection, which is additional to its potential $30m future obligation, is part of another $100m cash call by ST.

See Lex

Raine builds up to over £10m

By Andrew Taylor, Construction Correspondent

RAINE INDUSTRIES, the rapidly expanding housebuilder and contracting group, more than doubled pre-tax profits to £10.19m during the six months to end-December.

Raine last year lost to Tarmac in a 14 week battle to acquire Ruberoid, the roofing materials group.

Mr Peter Parkin, Raine chief executive, said profits from the sale of the company's 20 per cent stake in Ruberoid had contributed to an extraordinary profit of £1.4m which had been taken below the line.

Turnover increased from £72.59m to £139.31m. Earnings per share rose from 3.55p to to 5.54p, and the interim dividend is increased from 1p to 1.5p.

Mr Parkin said first half profits had been boosted by new acquisitions including the purchase of Evered's housebuilding arm. Profits growth in the second six months was unlikely to be as high.

Underlying profits growth in the first half, excluding the impact of acquisitions, was somewhere between 40 per cent and 50 per cent, said Mr Parkin.

Housebuilding operations were benefiting from low exposure to southern England where the housing market was weak.

Raine's most southerly site at Berkhamsted, Hertfordshire, was the only site where it failed to achieve sales targets. Sales at Berkhamsted were about a quarter down on budget said Mr Parkin.

Ha said margins were improving for contracting, where the group's order book for next year was already three quarters full.

Raine remained optimistic about long term prospects for its interior contracting operations which presently account for just under 20 per cent of profits. The business is to be reorganised and consolidated within a single division from the end of this year.

● COMMENT

A prospective p/e of about 9, on pre-tax profits of £22m and earnings per share of 12p, puts Raine on a rating well above the present average for housebuilders. Only about 50 per cent of Raina's profits, however, are this year likely to come from housebuilding. Less than 10 per cent of the company's housing operation is in southern England. Housebuilding, moreover, will benefit from improved margins from the reorganisation of the Evered business. Elsewhere, contracting margins are this year expected to creep up to around 3.5 per cent. But it is tha interior contracting side which is attracting most interest. Raine is vying to join the top five companies in the sector which between them account for more than £1bn of work a year. An acquisition by Raine in this sector seems likely. Prospects for further growth in earnings look good but it is difficult to see how the company in the short term can improve on its rating.

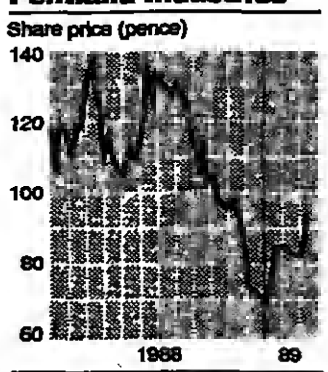
Pentland slips to £58.7m on Reeboks

By Alice Rawsthorn

PENTLAND INDUSTRIES, the consumer goods group that made an unsuccessful attempt to acquire Parker Pen last year, suffered a slump in pre-tax profits from £67.96m to £58.73m in 1988 due to the difficulties of Reebok, the US sports shoe company in which it has a sizeable stake.

Thanks to the apparently inexorable rise of Reebok in the fitness craze of the mid-1980s, Pentland became a fashionable growth stock on the

Pentland Industries



London stock market. But Reebok encountered problems with two recently acquired brands – Rockport and Avia – which failed to meet sales targets last year.

Meanwhile the profitability of its core Reebok business in the US was depressed by an increase in advertising and production costs.

As a result Pentland, which derives most of its income from its 32 per cent holding in Reebok, saw the pre-tax profit contributions from associates fall to £41.01m (£54.83m) in 1988.

The contribution to pre-tax profits from subsidiaries rose to £17.71m (£13.03m).

Group turnover rose to £650.36m (£487.37m) in the year to December 31. Earnings per share slipped to 13p (13.5p). The board proposes to double the final dividend to 1.0p (0.5p) making a total of 1.5p. Pentland's shares rose by 7p to 94p yesterday.

See Lex

Creating waves to the bitter end

Nikki Tait on the state of play in the First Technology/Ricardo bid

FEW CONTESTED bids worth £22m have created quite the waves which First Technology's offer for Ricardo, the Sussex-based designer of engines and transmissions, has done.

As the offer heads towards its final close tomorrow – First Technology has chosen to curtail the offer period – the path is strewn with court actions, nominee shareholdings, a mistaken acceptance, a clarified corporate brochure and, yesterday, a libel writ. This last development concerns certain statements by Ricardo about a management departure from First Technology's Humanetics subsidiary.

But these factors should not obscure the central industrial issue. This emerged fairly clearly at the outset and the arguments have not changed to any great extent since.

First Technology claims that the day of the integrated design and development business has arrived in the motor industry. It put its case succinctly in its second offer document: "Today, major vehicle manufacturers are forming long-term relationships with a limited group of integrated suppliers, capable of handling complete product packages from the design to the prototype stage, having hands-on experience of competitive production."

The company maintains that this belief has underpinned its recent corporate strategy. It was floated off from Midepsa, the Ashcroft/Wickens-owned company, in mid-1985 and had a rather complex early stock-market career.

But having begun life with interests in the manufacture and design of car sensors plus equipment for the security and fire detection market, it then made an abortive bid in 1987 for Hawtal Whiting, another UK automotive design consultancy. The acquisition of Humanetics, an American business which designs and makes crash dummies, followed.

The appeal of adding the renowned Ricardo name is fairly clear – but Dr Fred Westlake, chief executive, is adamant that whatever the outcome of the bid, First Technology will continue to sail its chosen tack.

Ricardo, with a history stretching back seventy years, views the matter differently. It protests that it already has the production engineering skills it needs, and knowledge of electro-mechanical sensors or dummies is an irrelevance. And with lengthy experience in the industry and 200 customers in 22 countries, it contends it has no need of First Technology's contacts.

In addition Dr Doug Taylor, who heads Ricardo, argues fiercely that product differentiation is the name of the game within the car industry. It is "just not true" that the likes of GM will parcel out whole projects, he says. "You come back to components, and we're doing that anyway."

And he goes further, suggesting that there are dangers in combining the businesses. He says that clients' work is confidential and that independence is critical.

"Loss of our independence to a component manufacturer would reduce our credibility as impartial contract engineering consultants. It could also place at risk significant revenues currently earned from our component manufacturing customers."

Moreover, there is the question of the company's staff – 180 engineers plus a further 50 technicians – who provide its engineering expertise. It is no secret that Ricardo's level of unfunded R&D is a significantly higher percentage of turnover than First Technology's.

Dr Westlake is quick to deny that this expenditure would drop immediately to the bottom-line if the groups were merged. Nevertheless, Ricardo maintains that the company's attitude towards engineering excellence is a critical factor in attracting the staff on which it depends. Moreover, argues Dr Taylor, there is a very fine balance between creating technology and using it.

It is a dispute which leaves analysts – there are relatively few who are both disinterested and follow the two companies closely – divided. On the one hand, First Technology's claims about the future path of the industry win some support.

As Kleinwort Benson, for example, puts it, the growth of "integrated out-house suppliers is the way in which the industry is going", and it cites Porsche as a company which operates across the spectrum. Another points out that Ricardo has not always appeared to sweat its winning asset – its name – as fiercely as it might have.

But the extent to which First Technology's parentage would benefit Ricardo is a moot point. "You could kill the goose that lays the golden egg", comments Warburg Securities.

If the arguments on this front are not decisive, how about price? Unfortunately for shareholders, there is no simple answer on this score, either.

Ricardo has not had the happiest of times during the eighties. The pre-tax figure stayed on a plateau between 1982 and 1984, jumped sharply to £2.12m in the year to end-June 1985, and rose to £2.77m in the following 12 months. It then slumped to £1.37m in 1986-87 and just £1.1m in 1987-88. Earnings last year were down from 6p to 5.4p.

In the course of the bid, Ricardo has provided ample evidence of a turnround in the current 12 months. It announced interim profits of £1.11m and, on Friday, forecast £2.4m for the full year with earnings sharply increased at 11.6p.

Inevitably, First Technology has fired the sort of salvos usually directed at forecasts made during bids. It has also made some play of the fact that James Capel, Ricardo's brokers, had been talking of just £1.4m for the current year, although such criticism are met by a claim that this was an old forecast, due for revision.

For more objective analysts, the key question is the extent to which the current year performance represents a sustainable turnround.

Ricardo has, indeed, slimmed its workforce, reorganised internally, and made a couple of modest acquisitions – Tuck Engineering, a US transmissions design business now rebased in Detroit, and Chicago-based FTI, a contract engine design company. On the back of what it claims is a more aggressive approach, it points out that the current order book stands at a record £21m.

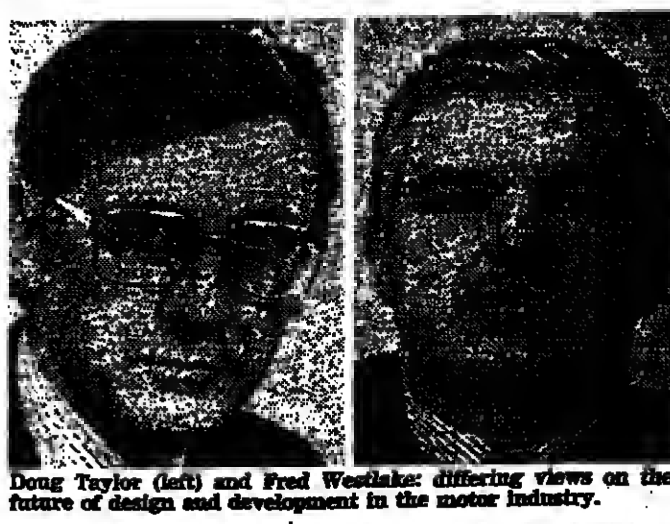
If this really is a new dawn, First Technology's terms are not overgenerous. The cash offer gives an exit multiple of 12.5 for a year that is three quarters over. On the share exchange terms the figure is about 13.6 times. One analyst sums up the dilemma "That's not a knock-out blow – but there still the question of where Ricardo will go in the future."

As for the upshot, First Technology had tied up about one-third of the shares at the first close. Ricardo, on the other hand, is reckoned to have around 15 per cent in the hands of directors and family and yesterday gained the public support of Scottish Amerian, speaking for 6.06 per cent.

A further 3.9 per cent is frozen, as a result of unsatisfactory replies to section 212 notices, although part of this – 1.9 per cent of the equity, belonging originally to Zurich-based Privatbank but now sold – has been irrevocably pledged to the bid. And inevitably, a chunk of the share register will be "dead", that is, untraceable or non-voting.

Perhaps the only point on which both sides, and most analysts, agree is that the outcome will be close. It is possible that key stakes would then be the 1.9 per cent pledged by Privatbank plus the near-five per cent holding which was submitted as an acceptance by Schroder Exempt Fund in error.

Unfortunately for Ricardo the Schroder acceptance cannot be withdrawn ahead of the final closing date. In this unparalleled situation, the waves, it seems, may continue to the bitter end.



Doug Taylor (left) and Fred Westlake: differing views on the future of design and development in the motor industry.

Hoskyns criticises the GEC/Siemens offer

By Hugo Dixon

HOSKYNS, the computer services company bought last year by Plessey, last week criticised the bid for the electronics company by GEC of the UK and Siemens of West Germany.

Mr Geoff Unwin, Hoskyns' chairman, said that the bid was unwelcome because the Anglo-German consortium had been silent in its offer document about its intentions towards Hoskyns.

"All that I can assume is either that they have absolutely no plans for us or they have no interest in us and, as such, neither of these things particularly turns me on and therefore it is very unwelcome," he said.

Mr Unwin also raised doubts about whether GEC/Siemens would be culturally compatible with Hoskyns, saying his company was a people-based business.

"At the root of it, it has got to be culturally compatible. The environment has got to be right in which that culture can flower. I have seen no evidence of that whatsoever from GEC/Siemens." He added:"I think their management style is old-fashioned."

Mr Unwin argued GEC's approach of rationalising businesses was unsuitable for Hoskyns.

"If you look at what GEC have done in the past, what they have done is to generate earnings per share out of rationalisation – ie, shedding labour. It strikes me that is not the problem we are facing. We are desperately trying to recruit and retain labour and rationalisation plays no part in the market."

Mr Unwin refused to say what Hoskyns would do if Plessey was taken over by GEC/Siemens, saying: "I reserve my defence on that."

Renishaw rises to £3.6m but warns on second half

By Vanessa Houlder

RENISHAW, the manufacturer of machine-tool measurement probes, yesterday announced a 27.5 per cent rise in pre-tax profits for the six months to the end of December.

The profits rose from an adjusted £2.78m to £3.55m on turnover that increased by 27 per cent to £17.35m (£13.58m). The share price rose 2p to 240p.

The company warned, however, that growth in the second half was unlikely to measure up to that of the first half.

In the US, Japan and Germany, its main markets, sales grew by 16 per cent, 46 per cent and 38 per cent respectively.

Demand for the laser interferometer calibration system, which was introduced a year ago, had outstripped early expectations in the US and Germany.

Interest receivable was £473,000 (£318,000). Earnings per share rose by 28 per cent to 6.44p (5.05p). An interim dividend of 1.4p (0.8p) was declared.

The 75 per cent increase in interim dividend was aimed to reduce the disparity between the interim and final dividend payments.

DIVIDENDS ANNOUNCED

		Current payment	Date of payment	Corresponding dividend	Total for year	Total last year
ABB Kent	fin	2	Jul 6	1.5	3.5	6
Baltic	fin	1.92	May 2	1.8	3.36	2.8
Bardsey	fin	0.5	-	0.25	0.75	0.25
British Vita	fin	3.7†	May 6	2.625*	6.5	4.625*
Caird Group	int	2.5†	-	1	-	4
Candover Invs	fin	10	-	6	13.5	9
Citygrove	fin	5	-	2.5	7.5	4
Delaney Group	fin	2.6†	May 15	2.2	3.9	3.3
Fisher (James)	fin	2.05	-	1.9	4	3.6
Glaxo Holdings	int	10	May 8	7	-	25
Gordon Russell	fin	5†	May 26	4	7.4	6
Low & Bonar	fin	4.8	-	4.15	7	6
MY Holdings	fin	1.5	May 23	1.05	2.05	1.5
Pegasus Group	int	3.375	Aug 3	2.25	-	7.5
Pentland Inds	fin	1	-	0.5	1.5	0.635
Perkins Foods §	fin	1.2†	May 19	0.6	2.5☆	1.8
Raine Industries	int	1.5	-	1	-	3
Renishaw	int	1.4	May 8	0.8*	–	2.64*
Tay Homes	int	1	May 5	0.69*	-	2.066*
Transport Dev	fin	6.5	May 12	6.25	9.5	8.5
Wyevale Garden §	fin	3.1	May 2	2.17	4.5	2.9

Dividends shown pence per share net except where otherwise stated. *Equivalent after allowing for scrip issue. †On capital increased by rights and/or acquisition issues. §USM stock. §§Unquoted stock. ¶Third market. ☆For 15 months.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the subdivisions shown below are based mainly on last year's timetables.

TODAY

Interims- Medminster, Precious Metals.
Finals- Automated Security, Hickson Intl, Hong Kong & Shanghai Bank, Inch Kenneth, Kode Intl, Northern Engineering, Palma, Process Systems, Robinson Bros, Thorpe.

FUTURE DATES

Interims-

Seezer	Mar. 30
Crumphorn	Mar. 22
Star Computer	Mar. 21
Yorkshire TV	Mar. 22

Finals-

Abbeycrest	Mar. 29
Boddington	Mar. 29
Booker	Mar. 20
Cambridge Electronic	Mar. 20
Cattle's	Mar. 16
Church & Co.	Mar. 17
Clyde Petroleum	Mar. 21
DRG	Mar. 16
Eadie	Mar. 21
Goal Petroleum	Mar. 21
Hewitt (J)	Mar. 21
ISA International	Apr. 10
Jones (A)	Mar. 17
Kleinwort Benson	Mar. 22
Law Debenture	Mar. 21
RTZ	Mar. 21
Royal Sovereign	Mar. 21
SD-Scicon	Mar. 16
Smith & Nephew	Mar. 22
Standard Chartered	Mar. 22
Telfos	Apr. 12
Tibbett & Britten	Mar. 22
Tilbury	Mar. 22

UK COMPANY NEWS

TDG hits £47m but sees slowdown

By Clare Pearson

SIR JAMES Duncan, chairman of Transport Development Group, yesterday said that slower UK economic growth meant the distribution and storage company's profits in the current year were not keeping pace with those for 1988.

His statement came at the same time as the company announced pre-tax profits slightly below City expectations at £47.09m (£43.55m) for the twelve months to end-December. Turnover stood at £613.81m (£548.58m).

Sir James said the thinning of margins in road haulage operations that had become apparent in the second half as competition intensified, was continuing. But he added it was too early to say whether this would apply to the year as a whole.

A high proportion of TDG's customers are in the retail sector, and Sir James suggested the problems being experienced at present might derive from overstocking during the Christmas period. It is in conventional road haulage operations, which account for approximately 25 per cent of the company's transport businesses, rather than "value-added" distribution activities, that TDG is immediately exposed to economic swings.

Meanwhile, storage continued to suffer as a result of diminishing EC intervention food stocks and consequent lower charges. TDG said some further rationalisation in the industry may be needed.

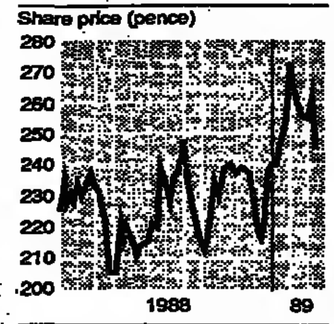
Earnings per share moved ahead to 21.38p (20.05p). The final dividend is lifted to 6.5p (6.25p) making 9.5p (8.5p) for the year.

The UK contributed £31.59m (£31.67m) to profits. Within this, transport put in £12.75m (£13.5m) on turnover of £196.94m (£184.3m). Storage provided £13.94m (£14.45m) on £64.88m (£61.43m). Plant hire and other services achieved £4.9m (£3.72m) on £31.53m (£23.53m).

For Europe, the breakdown showed transport contributing £7.44m (£7.07m) on turnover of £98.96m (£89.17m), storage £1.06m (£1.79m) on £5.97m (£7.07m), and the third category £605,000 (£575,000) on £8.32m (£6.93m).

Transport Development Group

Share price (pence)



The US, where TDG added a Chicago trucking operation during the year, provided £3.08m (£1.91m) on turnover of £56.54m (£48.21m). Australian profits recovered to £2.46m (£1.76m).

Businesses sold put in £8.91m (£6.11m), and included an "excellent" contribution from Square Grip Group, the steel reinforcement company which was sold for £59m two months ago. The sale reduced gearing from 36.5 to 9.2 per cent.

● **COMMENT**

Followers warn against drawing too many conclusions from Sir James' gloomy statement given TDG's perennially cautious stance and the notorious volatility of transport profits during the early part of the year. Nevertheless, assuming poor conditions continue in the first half, and adding to that continuing over-capacity in storage, the company is likely to produce a near-flat pre-tax figure of about £48m for 1989 as a whole. This leaves the shares – which ran up on the recent flotation of NFC – on a prospective p/e of about 11.5. This seems excessive although, longer-term, TDG's well-established position on the Continent mean the rewards of a single European market should be coming its way and also make it an attractive prospect for any predator.

Delaney profits rise to near £3m

By Andrew Hill

DELANEY GROUP, the shopfitter and furniture manufacturer now headed by Mr Nathu Ram Puri, increased pre-tax profits from a restated £2.83m to £2.94m in the 12 months to December 31.

Mr Ray Apted, managing director, said that 1988 had been a year of consolidation, as expected at the interim stage.

Turnover rose 8 per cent to £26.06m (£24.1m), but fully diluted earnings per share fell from 9.2p to 8.4p.

Mr Apted attributed the fall on a slight increase in the number of shares in issue and payment of the first preference share dividend.

The recommended final dividend is increased to 2.6p, making 3.9p (3.3p) for the year.

In December, Melton Medes, Mr Puri's private industrial company, bought the Delaney family's 25.1 per cent stake and Mr Puri became non-executive chairman of the group.

Melton Medes, which has also declared stakes in British Syphon Industries and Marling Industries, may increase its holding in Delaney to 29.9 per cent but Mr Puri yesterday said he had no immediate intention of mounting a full bid for the company.

Delaney's furniture division, which makes reproduction wood furniture, suffered following a move to a new factory in Birmingham.

Profits fell more than 80 per cent to £132,000 before tax, on turnover of £7.19m.

Restructuring at the division also accounted for the bulk of the £231,000 exceptional charge, relating to changes in the group's product range.

An extraordinary charge of £400,000 mainly represented the cost of closing one furniture operation and losses on the disposal of a shopfitting subsidiary.

Mr Apted said he hoped the furniture division would be returning annual pre-tax profits of at least £1m by the end of 1991.

The building products division – making and selling fitted bedrooms and staircases – showed a 38 per cent increase in profits to £1.51m before tax in 1988, and shopfitting profits rose 30 per cent to £1.28m.

Increased investment in new factories led to a rise in borrowings.

Gearing stood at 25 per cent of shareholders' funds by the end of 1988 and, according to the company, is likely to increase further during 1989.

Higher property contribution helps Baltic rise to £11.82m

By Vanessa Houlder

BALTIC, the asset finance, property and financial services group, yesterday announced a 61 per cent rise from £7.32m to £11.82m in pre-tax profits for 1988. Turnover increased 92 per cent to £51.15m.

Property finance and development activities increased their share of profits from 29 per cent to 35 per cent, following completion of developments such as the London Docklands. Mr Harry Hyman, finance director, said that developments in Trafford Park and Telford were progressing well and should contribute to profits this year.

The £10m acquisition last December of Saturn Group, a lease broker, made a negligible contribution to profits of the asset finance division, which accounted for about 60 per cent of profits, compared with 66 per cent in the previous year.

Mr Hyman said that the integration of Saturn was going well and it was expected to make a substantial contribution.

Investment activities contributed 5 per cent of profits, and was expected to expand in view of the substantial increase in the group's equity base.

The tax charge increased from 22 per cent to 29 per cent, reflecting the increase in income from non-asset finance related activities.

Fully diluted earnings per share rose 20 per cent to 17p (14.2p) and a proposed final dividend of 1.92p gives a total of 3.36p (2.8p) for the year.

● **COMMENT**

After a year in the doldrums, new life has been breathed into Baltic's shares. They have risen by 30 per cent in the last couple of months – mainly thanks to a general improvement of sentiment towards its sector. The latest fillip, for example, is hard to credit to anything more palpable than the general excitement over Anglo Leasing. Even after the recent run, though, the shares down 2p to 180p, are on a fully diluted p/e of 8. That does not seem exacting given Baltic's strong record and relatively stable clutch of businesses. Furthermore, its gearing – for a leasing company – is decidedly low at just 150 per cent. That gives Baltic scope for further acquisitions, which will probably be used to boost its fee income and should, therefore, improve its quality of earnings.

Bardsey 88% expansion to £1.51m

Bardsey, the hand tool manufacturer and distributor, yesterday unveiled an 88 per cent upturn in taxable profits for 1988.

On turnover up from £28.73m to £32.31m, pre-tax profits rose to £1.51m (£802,000). Mr David Burnet, chairman, said there was increasing customer awareness of the group's Rabone brand nams, marketed strongly in the past year. RCF Tools recorded increased sales and better margins, he added.

Borrowings had again been reduced, Mr Burnet stated. Gearing currently stands at 13 per cent, down 4 per cent from the previous year.

Earnings per share rose 2.18p to 5.35p and a recommended final dividend of 0.5p makes a total of 0.75p (0.25p) for the year.

Candover net assets rise 36%

By Charles Batchelor

SUCCESSFUL STOCK market listings for three of the management buy-outs backed by Candover Investments enabled the only quoted UK management buy-out specialist to increase net assets per share by 36 per cent to 477p in 1988.

To emphasise the profitability of buy-outs over quoted company investments, Candover compared its increase in asset values with the 6.5 per cent rise in the FT-A All Share Index over the same period.

Candover's investment of £139,000 in Rechem Environmental Services, a chemical waste treatment group, was worth £2.62m at listing while its holding in NKF Holding, a Dutch cable manufacturer was worth £600,000 at the time of listing in Amsterdam compared with the original cost of £275,000. Candover also made a good return on UK Paper, the third company to go public.

Candover increased profits before tax by 76 per cent to £2.13m and announced a proposed final dividend of 10p making 13.5p for the year, an increase of 50 per cent over 1987. It also plans a two-for-one scrip issue.

The company is currently raising a new management buy-out fund which it hopes will attract at least £200m to invest in companies throughout Europe.

Candover does not expect to be able to maintain last year's rate of growth in 1989 but it is reasonably confident it can maintain profits and perhaps achieve some increase, said Mr Roger Brooke, chief executive.

Total net assets at December 31 1988 were £34.68m, an increase of 36 per cent on the previous year's figure of £25.44m. Fully diluted earnings per share rose 95 per cent to 19.7p.

Lucas £9.2m US purchase

By John Ridding

LUCAS INDUSTRIES, the automotive, aerospace and industrial group, has reached agreement with US-based Computer & Communications Technology Corp to acquire its subsidiary, Zeta Laboratories, for $15.8m (£9.2m) in cash.

The new company will be renamed Lucas Zeta and will be the latest addition to the subsidiary, Lucas Aerospace.

Zeta Laboratories is a leading supplier of microwave signal sources, communications signal intercept equipment and direction finding equipment for defence electronics applications. It has an annual turnover of $20m.

In a related development, Lucas also announced yesterday that it is to form a new division, Lucas Asrospace Defence Electronics. Lucas described this as a major strategic move aimed at integrating and providing sharper management focus for its defence electronics businesses.

In addition to Lucas Zeta, the new division will comprise two other US-based companies – Lucas Epsco, which designs and manufactures radio frequency and microwave components, and Lucas Weinschel, which specialises in passive microwave components (such as attentuators and connectors) and microwave test and calibration equipment.

Mr Denis Magee, chief executive of Lucas Aerospace, said "the mission of the new division will be to integrate internally designed and manufactured components into sub-system and system level products for defence and commercial applications for both the US and international markets." He added that Lucas had not yet completed its acquisition programme.

With the addition of Lucas Zeta, the annual sales of Lucas Aerospace in North America now total $490m of which some $100m derives from the microwave and electronics systems sectors.

Gordon Russell profits surge

Gordon Russell, office furniture manufacturer, reported record profits for 1988 of £4.33m, up 65 per cent on the previous £2.62m. Turnover rose 57 per cent from £24.41m to £38.39m.

Earnings per share were 24.6p (18.1p) and the directors are recommending a final dividend of 5p (4p) making a total for the year of 7.4p, against 6p.

Mr Simpson said that the strong demand reflected the buoyant market. Existing businesses improved margins and saw strong organic growth.

Alliance Trust

THE Alliance Trust reported net asset value up from £10.21 to £11.70 at end-January, with earnings per share showing an increase from 27.85p to 31.27p.

Net profits increased from £14.11m to £15.83m, with a final dividend of 22.25p making 31p (27.5p) for the year to January 31 1989.

Perkins Foods nears £3m

By John Ridding

PERKINS FOODS yesterday announced pre-tax profits of £2.84m for the fifteen months to the end of 1988 from a turnover of £63.7m.

The acquisitive foods group has changed its year-end and the figures compare with £682,000 and £22m respectively for the 12 months to October 3 1987. The shares closed 2p down yesterday at 98p.

An estimated £2m of the profits under review came from Hage, the Dutch fruit and vegetable importer which was acquired in September.

The directors are recommending a final dividend of 1.2p making 2.5p for the 15 months, a 39 per cent increase on the dividend paid for the previous financial year. Earnings per share were 5.9p (3.5p).

Mr Howard Phillips, chief executive, said he was very pleased with the results. He added that "it had been a dynamic year for Perkins. The size of the group had increased significantly as had its range of activities."

The most significant step was the £38.6m purchase of Hage which gave Perkins a major presence in northern Europe as a distributor of fresh produce.

Six further acquisitions were made during the period, giving Perkins a presence in mushroom processing and distribution in Germany and The Netherlands and in three new markets in the UK – seafood, prepared meat products and frozen speciality vegetables.

Mr Phillips said that the company was placing particular emphasis on earnings growth and that organic growth would also be a priority.

● **COMMENT**

Perkins has changed beyond recognition during this period. In particular, the group is still digesting its purchase of Hage, a company three times its size, which completed its transformation from a small meat-processing company. The rapid change complicates comparisons but the profits returned over the fifteen months were higher than City forecasts. Prospects for the current year are also good. Hage, now the key business, enjoys a fairly strong competitive position in a buoyant market. It also enables higher margins through its ability to provide supermarkets with "off season" fruit and vegetables. Ironically, the only question mark over the various subsidiary markets is Perkins Meats, the original base of the group. With a recently agreed loan facility of £20m and a net cash balance of £4m further acquisitions can be expected, complicating forecasts for 1989. However, a profit target of £8m seems reasonable giving a prospective multiple of around 13.

IBC buys US publisher for £1.2m

By Clay Harris

INTERNATIONAL BUSINESS Communications (Holdings), the newsletter publisher and conferences organiser, has bought International Reports, a US-based publisher of seven newsletters and advisory services, from Pearson for $2m (£1.16m) in cash.

Pearson, the diversified group which owns the Financial Times, will also receive a yet-to-be-determined amount of deferred subscription income. It bought International Reports in 1982, in a deal which cost about $4m in total.

Mr David Spencer-Crow, director and general manager of Financial Times Business Information, said the unit was too small to be managed efficiently from the UK.

International Reports made pre-tax profits of $194,000 in 1988, although the record has been volatile. The company lost $85,000 in 1987, after showing a $347,000 profit in 1986.

Mr Jonathan Bloch, publisher of IBC's US newsletters, said yesterday that he had already closed International Reports' London editorial and printing office and consolidated its operations in New York.

The acquisition is IBC's second in recent months. It bought the political risk division of Frost and Sullivan, the US-based international marketing group, for an undisclosed sum last month.

European Leisure profits surge to £1.43m

EUROPEAN LEISURE, the leisure group and shoe manufacturer which changed its name from Edenberry Group in June last year and switched its reporting currency from Irish pounds to sterling in July, achieved a sharp climb in pre-tax profits in the half-year to December 31.

The rise from £131,000 to £1.43m was struck on turnover more than doubled to £10.05m (£4.97m).

Of this, leisure activities accounted for £6.81m, with trading profits of £1.64m, and the shoe businesses £3.24m with trading profits of £3,000.

Earnings per share moved up from 0.25p to 2.7p and the interim dividend is 0.5p (nil).

In late February the company bought the Applejacks nightclub in Manchester for £500,000.

The company said that this and previous acquisitions fitted the strategy of developing a vehicle for investment in the fast-growing consumer leisure markets in the UK and Europe.

This leaves the shoe businesses out on a limb and the London manufacturing and distribution company was closed in February, giving rise to an extraordinary debit of £342,000 (£126,000).

Mr Michael Ward, chairman, said the group was experiencing a high rate of growth.

The company was looking forward to a period of further corporate development, having created a sound network of leisure businesses and an experienced management team.

Bowater sells AmAs operation for £15m

By Andrew Hill

BOWATER Industries, the packaging and industrial products group, has raised Fl55m (£15.2m) in cash from the sale of AmAs Holding, its Netherlands customs and warehousing operation.

The packaging company announced the sale, to Inter Forward, a subsidiary of Ratos, the Swedish holding company, at the beginning of February, but did not specify the price.

Two weeks ago, Bowater said it was to sell its West German freight services subsidiary to Peninsular and Oriental Steam Navigation for £45m in cash. Proceeds of Bowater's withdrawal from the freight sector will be used to develop the company's core business.

Jantar recommends offer from Parris and ETL

JANTAR, the shell mining and minerals trading company, has recommended a takeover offer by Mr Stephen Parris, an ex-stockbroker, and European Trust, a British Virgin Island company wholly-owned by Mr Robert Adriaansen who is the managing director of the Swiss HFP group of companies.

The offer price of 100p values Jantar at £4.9m. Last Thursday, it emerged that Mr Parris and ETL had acquired a total of 50 per cent of Jantar. Mr Parris and Mr Andriaansen will join the Jantar board.

On the close of the offer, Mr Parris will become chairman.

Jantar on Thursday announced pre-tax profits of £29,646 in the year to December 31.

News Digest

TAY HOMES

Surge to £2.64m at six months

MR TREVOR Spencer, chairman of Tay Homes, the Leeds-based housebuilder which recently graduated from the USM to a full listing, yesterday reported a £1.83m surge in interim profits to £2.64m pre-tax.

The half year to December 31 saw turnover rise to £17.9m (£9.49m) with the number of homes sold ahead from 185 to 292 – operations in Yorkshire and Scotland currently account for some 80 per cent of turnover.

Interest charges were £540,000 (£65,000) and tax £960,000 (£475,000). Earnings worked through 4p higher at 7.9p and shareholders are to receive a 0.31p boost in their interim dividend to 1p per 25p share.

PEGASUS GROUP

Software house takes off

Pegasus Group, a USM-quoted microcomputer software house, lifted taxable profits 50 per cent from £863,000 to £1.3m to the half year to January 31 1989. Turnover expanded 12 per cent to £3.91m.

Earnings per 5p share also showed a 50 per cent increase, to 15.6p. The interim dividend is raised to 3.375p (2.25p).

WYEVALE

Looking green in the garden

Pre-tax profits growth of 89 per cent was reported by Wyevale Garden Centres in the year to end-December. The outcome – up from £754,000 to £1.43m – was achieved on sales 65 per cent ahead at £13.1m.

Mr Bill Wyman, chairman of this USM-quoted garden centre operator, said investment in expansion of sales areas, internal refits and improved communications continued according to plan.

Earnings per 50p share rose to 15.9p (9.5p) and the proposed final dividend of 3.1p makes 4.5p (2.9p) for the year.

JAMES NEILL

Haggie takes 60% stake

Haggie, the South African industrial group, is to take a 60 per cent in James Neill Holdings' local subsidiary by subscribing R5m (£1.15m) in new capital.

● James Wilkes, the printing and engineering group, has increased its stake in Neill from 5.47 per cent to 9.2 per cent through share purchases at 267½p.

JAMES FISHER

Profits 17% up at £3.06m

Profits for 1988 increased 17 per cent from £2.61m to £3.06m at James Fisher and Sons. Turnover for this shipowner, ship and insurance broker, ship manager and stevedore was 11 per cent lower at £27.59m, against £31.01m.

Earnings per share were 8.44p (6.71p) and the proposed final dividend is higher at 2.05p for a total of 4p (3.6p). An an extraordinary credit of £8.01m (£21,432) arose from the disposal of three freehold port interests.

MY HOLDINGS

Advance of over £1m

MY Holdings, recently taken over by Tawneydown, a subsidiary of Malbak, itself 63 per cent-controlled by South African mining group Genco, raised its 1988 profits from £2.77m to £3.81m pre-tax on a turnover of £49.56m compared with £37.13m.

Earnings of MY, a manufacturer of packaging and consumer products, emerged at 6.31p (5.02p) and a final dividend of 1.5p makes a total of 2.05p, a 36 per cent improvement on 1987's 1.5p. The deferred ordinary shares rank pari passu with the ordinary shares from January 1 and therefore qualify to receive the final payment.

BROWN & JACKSON

Poundstretcher deal completed

Brown & Jackson has completed the acquisition of Poundstretcher. Part of the financing was made via an open offer to shareholders of 5.41m new ordinary shares and 5.41m new preference shares. Acceptances were received as to 21.7 per cent of each class.

In addition to the open offer, 10m new shares of each class were placed. On completion of the acquisiton B&J will have paid £60.5m in cash and issued 13m new ordinary shares.

AYRSHIRE METAL

Profits more than doubled

Ayrshire Metal showed profits up from £966,000 to £2.47m for the year ending December 31 1988, on turnover up from £23.92m to £31.92m.

The final dividend is substantially up at 7p (1.5p) making 10.5p (2p) for the year.

The company is continuing to develop its commercial vehicle chassis business. This now forms a substantial part of turnover from its Irvine factory, which accounted for £962,000 of the year's £1.26m capital expenditure.

COMPANY NEWS IN BRIEF

AAH HOLDINGS is to sell two agency distribution businesses, Pharmagen and David Anthony Pharmaceuticals, to Clairan. Separately, it is acquiring HB Mattia, a Guildford-based regional wholesale distributor of domestic electrical appliances, for about £400,000 cash.

ADSCENE GROUP has acquired Abberguild, which publishes four local free weekly newspapers in Kent, for £200,000 cash. The consideration will increase to a maximum of £420,000, based upon Abberguild achieving pre-tax profits of £100,000 in the first 12 months following acquisition. The maximum balance payable of £220,000 will be £120,000 cash and £100,000 shares.

CONSOLIDATED TERN Investments is proposing to change its name to Tern.

CRAY ELETRONICS Holdings is to acquired Beatcan for an initial consideration of £1.6m, to be satisfied by the issue of 514,078 Cray ordinary and £760,000 cash. In addition, the agreement provides for Cray to issue further ordinary up to £400,000 to certain of the vendors if Beatcan reaches an agreed level of profitability in the period from February 1 1989 to April 28 1990.

JACKSONS BOURNE End has exchanged a conditional contract with Barclays Nominees (George Yard) for the sale of its freehold interest in Jacksons Business Centre, in High Wycombe, Buckinghamshire. Gross consideration is £3.9m cash on completion. At December 31 1988 the property had a book value of £3.8m.

MERGER CLEARANCES: The Secretary of State for Trade and Industry has decided not to refer the following mergers to the Monopolies and Mergers Commission:– The proposed acquisition by Lex Service of Chart Services; the acquisition by Munksjo of Chapman Industries; the proposed acquisition by Bridon of Johnson and Nephew, Fox Wire, and Lionweld Kennedy; the proposed acquisition by Twill of Bridon shareholding in Twill Limited, following which the Bekaert Group's shareholding in Twill will increase from 40 per cent to 60, while British Steel shareholding will increase from 20 per cent to 40 per cent.

SINGAPORE PARA Rubber results for 1988 show pre-tax profits up from £330,000 to £564,000. The dividend is 1.55p (1.1p) from earnings of 3.04p (1.93p). Tax took £247,000.

SPECTRUM GROUP, through its newly-formed subsidiary, Reflex Ribbon Manufacturing, has acquired Coralyn, which makes ribbons for a wide variety of printers. Consideration for the deal is £130,000 cash.

STANCO EXHIBITION is to acquire G J Blevins for an initial consideration of £1.76m to be satisfied by the allotment of 4.8m Stanco ordinary and £167,576 cash. There is provision for deferred consideration but the total of the initial and deferred consideration will not exceed £3m.

THROGMORTON TRUST is planning to acquire the outstanding capital in Framlington Group. Consideration for the B series 710% cumulative redeemable preference shares will be satisfied by the issue of £1.54m nominal of 7.25% convertible unsecured loan stock 2003.

TYZACK has sold Little London Works, Sheffield, for £1.05m in cash and a further payment of £250,000 upon receipt of class A1 retail use planning permission within two years of completion. The property has a book value of £759,000.

UNIGATE sale of seven milk processing plants to Dairy Crest will not be referred to the Monopolies Commission.

UNITED GUARANTEE has disposed of part of the business of its wholly-owned subsidiary UBH (Mechanical Services) for a cash consideration of £465,000.

WATERGLADE International has formed a Dutch holding company, Zaaterco Holdings, which will hold investments and carry out developments in West Germany.

WELPAC has exchanged conditional contracts for the purchase of a 3.6 acre site at Thames Road, Barking for £1.63m cash. At the same time the company has conditionally entered into a building contract for the erection on the site of two 40,000 sq ft warehouses and office units at an estimated cost of £2.8m.

WHITEGATE LEISURE is buying Gemrace, which owns the Wakefield Theatre Club, a vacant freehold property with planning permission and a provisional licence for use as a ten pin bowling centre. Consideration will be satisfied by the issue to the vendors of 424,238 ordinary.

COMMODITIES AND AGRICULTURE

Inauspicious start for cocoa pact meeting

By David Blackwell

TALKS IN London aimed at untangling the deadlock in the International Cocoa Agreement got off to an inauspicious start yesterday.

Delegates to the International Cocoa Organisation (ICCO) special session were late yesterday evening wrangling over procedural matters, unable to agree an agenda for the meeting, which is scheduled to end on Wednesday week. "It might have been better to stay at home and go fishing," said one weary delegate.

The meeting was called by the UK, West Germany and the Netherlands – countries which feel that it is inequitable for consumers to be still paying a $30-a-tonne import levy on cocoa while exporters owe the agreement about $95m. They are seeking a suspension of all levies, and are also pressing for an end to a year-long row over the price range which the agreement should be defending.

Last night the ICCO indicator stood at 1095.01 Special Drawing Rights a tonne, while the defence range remains at 1,485 to 2,155 SDRs a tonne. Three previous attempts to lower the range, which consumers say should have been automatically reduced under the agreement's rules, have ended in failure.

The cocoa markets are not expecting much from the latest round of talks. Last night on the London Futures and Options Exchange the May contract closed down £11 at £842 a tonne.

The agreement's buffer stock contains 250,000 tonnes of cocoa. Enough money is in the kitty to maintain this level until the end of September – but towards the end of this year stocks may have to be sold to meet costs.

● Record world cocoa output will exceed offtake by 199,000 tonnes in 1988-89 (October-September), the ICCO said yesterday. This compares with its previous forecast, issued last October, for a 155,000 tonne surplus.

The ICCO forecast gross world bean production at a record 2.31m tonnes, up from a revised 2.17m tonnes in 1987-88. Its latest statistical bulletin put world bean grindings at 2.09m tonnes against a revised 1.96m tonnes last season.

Fire shuts down Ekofisk oil field

By Karen Fossli in Oslo

OIL AND gas production from Norway's prolific Ekofisk field could be shut down at least until tomorrow as Phillips Petroleum Norway, a subsidiary of US-based Phillips Petroleum, seeks to repair damage in cables located in the vicinity of the crude oil separator pump which caught fire early yesterday morning.

Crude oil production totalling 400,000 barrels a day from the seven-field Ekofisk complex had to be shut down along with production from the Ula and Valhall fields. In addition, about 1.8bn cubic feet of gas from the Statfjord and Ekofisk fields was shut down, as was the Statpipe gas pipeline.

Mr Rolf Wiborg, a senior executive with Phillips, said that production from Ula and Valhall and gas transportation through the Statpipe line was back on stream late yesterday.

The value of the crude oil and gas which was shut down is between NKr 45m and 55m (£5.6m and £6.1m) a day.

The crude oil is transported to Teesside while the natural gas goes to Emden, Germany, where it is distributed to a consortium of European buyers.

The Norwegian Petroleum Directorate said it had sent two representatives to the Ekofisk field to investigate the cause of the fire.

According to Mr Wiborg, a leak developed in the packing on one of six "low stage" separator pumps, spewing oil and gas which ignited. Separator pumps help sort oil from a mixture of water, gas and crude that comes out of a well.

Ekofisk was the first oil field to be discovered on Norway's continental shelf and started production in 1971.

Phillips is currently involved in an extensive secondary crude oil recovery programme to squeeze as much oil from the reservoir as possible by flooding it with water. The Oklahoma-based oil company is also considering implementing a multi-million dollar secondary recovery programme to produce additional amounts of natural gas.

● The Ekofisk shutdown contributed to a sharp rise in oil prices, with Brent crude for April delivery up 57½ cents to $17.57½ a barrel. Export cuts by non-Opec producers and robust demand have also contributed to recent price strength.

LME WAREHOUSE STOCKS
(Change during week ended last Friday) tonnes

Aluminium	+8,650	to 140,900
Copper	+1,775	to 87,25[illegible]
Lead	−3,025	to 47,050
Nickel	+225	to 3,390
Zinc	−450	to 40,175
Tin	−265	to 1,260
Silver (oz)	−596,000	to 13,730,000

Strikes hit Guyana sugar and bauxite industries

By Canute James in Kingston

A WAVE of strikes has hit Guyana's bauxite and sugar industries following a decision by the state-owned mining company to withdraw recognition from unions representing miners.

The sugar unions have started secondary activity to support the mine workers. The unions and the bauxite and sugar companies have disagreed over the effects of the strikes.

While the unions claim that operations at mines and sugar mills have been significantly reduced, the companies suggest the strikes have had only a marginal impact. But the disruptions will affect efforts to lift output in both sectors which are the leading foreign currency earners for the economy.

Bauxite ore output has averaged 1.5m tonnes a year in spite of government efforts to lift production, while the sugar industry last year produced 20 per cent less than the 221,000 tonnes of 1987.

Lamb decline worries NZ

A DRAMATIC drop in New Zealand's lamb crop, which has fallen by 14m head over the last five years, is worrying the NZ Meat Board, writes Dai Hayward in Wellington.

Mr Jim Thomson, the Chief executive, has warned that the country would not be able to maintain some of its smaller markets if the decline continued. The lamb crop is expected to drop by another 3m to 4m next season. Only five years ago New Zealand processed 40m lambs for export. Last year the total was down to 29m and this year only 26.9m were available for export.

Compounding the problem is the effect of the South Island drought, as a result of which the average weight of this year's crop fell 1.42 kg.

Because of high costs and declining prices over the past few seasons, many farmers have stopped producing lambs for export and have concentrated on wool production. This year, however, meat prices have improved and the board is anxious to stop the decline in lamb production.

India in urgent need of a major oil find

K.K. Sharma explains why foreign exploration companies are now welcomed

CHEVRON OF the US expects to begin drilling its first well in India's eastern continental shelf in the next three months and is thus taking the lead among the four foreign oil companies that were last year awarded offshore blocks for exploratory drilling by the Government.

The others are International Petroleum Corporation of Canada, BHP of Australia and Shell of Holland. All have recently completed seismic surveys and processing of data to determine the best points for drilling in the seven blocks thrown open to them.

Their efforts are being watched closely by Ministry of Petroleum officials. No major find of the kind that led to development of the rich Bombay High offshore field by the Government-owned Oil and Natural Gas Commission has been made for more than a decade.

The resulting stagnation in oil production has forced India to increase its imports and added to the strains on the balance of payments. This explains the major change in the Government's exploration policy which has ended the monopoly of the two public sector companies, the ONGC and Oil India.

The entry of the private sector began with the contracts for drilling in offshore tracts awarded to the four foreign companies. Previous invitations brought little response and all the three wells begun by foreign companies in the past decade proved to be dry.

In contrast, the present four companies are operating simultaneously in seven blocks in various parts of the continental shelf. They made their bids after the Government relaxed significantly the terms on which they were offered.

Now the public sector monopoly is being ended in onshore areas as well. It is possible that, in addition to the exploration contracts given to the Soviets in eastern India recently, onshore areas will be opened to foreign companies.

Indian private companies are now being allowed to enter the oil industry for the first time. Hindustan Oil Exploration is the first such private company to join Oil India in carrying out surveys in north-eastern and eastern India, where its operations are to begin soon.

Other Indian private firms in the running to enter the industry include Reliance Industries and the Essar group. Reliance is said to be seeking not just exploratory rights but also permission to set up a 6m-tonnes-a-year refinery. This would be the first privately-owned refinery in the country.

The policy change is part of the Government's liberalisation of its approach to private foreign and Indian companies in various sectors. As in the case of electricity generation and road building – where success in attracting private industry has been limited – the aim is to tap financial and managerial resources because of the shortage of both in Government-owned companies.

In the case of the oil sector, a major contributing factor is the limited success achieved by the Oil and Natural Gas Commission in increasing India's oil production in the past decade.

Since consumption of oil is rising at nearly 8 per cent a year, the gap between supply and demand has been met by imports. In 1988-89 India will import just over 17m tonnes at a cost of about Rs 28bn in addition to 5.8m tonnes of refined products worth Rs 15bn.

Although a substantial part of the imports are made under barter deals with the Soviet Union, more than 12m tonnes imported from the Middle East have to be paid for in foreign currency, thereby adding to India's serious balance of payments problems.

India itself produces just over 30m tonnes a year, about 60 per cent of its needs. Nearly 23m tonnes comes from Bombay High and other offshore fields, with onshore production at just under 7m tonnes a year for the past four decades.

ONGC and Oil India expect to add to their production in the next decade, but it is now recognised that both foreign and Indian companies must be given a prominent role in the industry if the country's growing energy needs are to be met without straining scarce hard currency resources.

Blending tea with technology in Malawi

Mike Hall reports on advances being pioneered by Africa's second biggest producer

MALAWI SEEMS to have recovered from the drought that devastated its tea production in 1987, when output dropped to only 31.9m kg.

Last year the industry produced a record crop of 40.16m kg, according to the Tea Association, and as the "flush" season comes to an end, estate returns this year show a January record. But because of recent heavy rainfall buyers expect a decline in quality and prices.

Prices at the local Limbe auctions this year have been reasonable, averaging 237.33 tambala (98.1 cents) so far compared with 196.37 tambala (72.1 cents) over the same period last year. Yet estate managers are making desperate efforts to diversify, and smallholders are suffering from the burden of taking out foreign loans before devaluation began.

Malawi is Africa's second biggest producer of tea, accounting for 35m to 40m kg a year. Almost all of it is exported, making up about 3 to 4 per cent of world exports - far behind Africa's biggest producer, Kenya, which accounted for 13.9 per cent last year.

Kenyan tea, with its distinctive flavour, is superior to Malawi's. It is grown at a higher altitude with more consistent high rainfall and regular daylight hours. Malawi is at a disadvantage with a lower altitude, shorter "flush" season (a period of rapid growth during summer rains) and varying day lengths. Such conditions can produce only a low-medium grade tea. But buyers say its quality for the category is good, and it is popular with blenders as an inexpensive filler with a "neutral" liquor.

All but 5 per cent is grown in the Shire highlands of southern Malawi. There are 25 estates covering 15,500 hectares, and only three in the north accounting for another 900 ha. Estate ownership has gradually become concentrated – in 1967 there were 50 estates.

With little scope for increasing planted area the country can only expand tea production by boosting yields

Now, a few large companies – Eastern Produce, Lonrho, and Unilever – dominate the industry. But four estates – covering about 20 per cent of the total area – are still privately owned, three of them by the families of the original European founders.

Smallholders were encouraged after independence, and there are now about 4,800 of them – many former estate workers. They account for another 2,400 ha and have their own factory in the south, which tasters say produces some of the best teas.

Despite its site and climatic disadvantages, observers say Malawi has one of the world's most advanced tea industries. Yields are high in the Shire highlands, having increased on average at a steady 4 per cent a year with very little increase in area. Land pressure is acute and there is little room to expand except by increasing yields.

The smallholder scheme is expected to cover only 800 ha more over the next decade.

It is in the north where the industry sees opportunities for expansion. There are currently three estates, two of which are owned by the Commonwealth Development Corporation. Producers are backed by the Tea Research Foundation of Central Africa, based in Mulanje in the south. It is said to be one of the best in the world. Much of its research is aimed at on increasing yields of existing tea without sacrificing quality.

MALAWI TEA

	Production (m kg)	Area ('000 ha)
1988	40.2	16.5
1987	31.9	16.5
1986	38.9	16.5
1985	38.9	16.5
1984	37.5	16.5
1979	31.3	16.3
1974	25.0	15.6
1969	16.9	13.2
1964	12.5	11.0

As a rule higher yields mean lower quality and lower prices, but some of the foundation's new high-yielding clonal varieties are actually producing tea of a much higher quality. Areas remain small, however, and buyers say even these do not match most Kenyan tea.

Yield and quality is finely balanced, and some observers believe that with the price structure forcing producers to keep unit costs down in order to maintain margins, quality may be losing out.

Prices have crashed since the heady days of 1984 when, as one merchant put it "some made fortunes and others lost them." And this is reflected in export earnings. In 1984 the industry earned $80m, but by last year this had fallen to only $27m – though export volume had declined only marginally. This year it is not expected to be much higher.

But the high prices of 1984 gave estates an opportunity to invest and many poured millions into modernising factories. Withering areas were enlarged and new processing machines, fluid bed dryers and continuous fermenting systems were installed.

The results of all this began to show in late 1986 when better teas reached the auctions. Some estates have been able to add substantially to prices.

Malawi's transport problem reduces returns to growers, however. Some tea is exported via the northern corridor to Dar-es-Salaam, but most goes out via the long and expensive South African routes, and this cost is shouldered by producers.

The industry should receive a substantial boost if, and when, the railway through Mozambique to Nacala on the Indian Ocean is opened.

Malawi's tea is sold both in London and at the Limbe auctions. Government policy has been to allow total freedom to both tea and coffee producers to decide where to sell. London prices have been consistently lower and the volume of tea sold locally has risen to 30-40 per cent of the crop. Many in the industry would like to see it rise still higher.

Limbe brokers are also now selling tea from other countries in the region. Over 500,000 kg from Zimbabwe was sold in Limbe last year and small quantities are now coming in from Mozambique.

Sales at the Limbe market have risen dramatically this year, from 66,570 packages over the first two months of 1988 to 100,904 packages in the same period in 1989.

One of Malawi's biggest problems is its lack of any significant internal market. It is therefore totally vulnerable to international prices. It is also heavily dependent on the UK market, which imports more than two-thirds of the crop. South Africa is the second biggest importer, followed by Pakistan and the US.

Efforts are being made to broaden the industry's export base, for there are potentially large markets – such as the Middle East – which Malawi is currently to penetrate.

Malawi will never be able to compete with Kenyan and Sri Lankan tea, however. All the industry can hope to do is to produce low-medium teas more efficiently.

The Tea Research Foundation has recently set up a factory in Mulanje in which it will install monitoring equipment to measure variables such as humidity, wind speed and temperature during tea-making.

This information will be logged by computer and used to develop manufacturing processes which yield maximum quality and hence price.

But the state of the industry is such that almost all estates are spreading their risks. As one well-travelled buyer observed: "Malawi is the only country where I've seen coffee, tobacco, macadamia nuts and tung trees growing on a tea estate."

WORLD COMMODITIES PRICES

LONDON MARKETS

NICKEL PRICES came under further pressure yesterday following the announcement of an unexpected 222-tonne rise in London Metal Exchange warehouse stocks. The cash position, which had fallen by $1,375 last week, closed $650 down at $17,000 a tonne in spite of recovering some of the early losses during the afternoon. Dealers said morning selling had taken the three months price through a support area around $16,500 a tonne. The zinc market's uncertainty continued, with the cash quotation surrendering Friday's $30 rally. Copper also lost ground, under pressure from what dealers described as "stale bull liquidation." The cash price fell £65 to £1,897.50 a tonne, narrowing the premium over three months, which was down only £24. Aluminium's continuing slide took the cash price to a 13-month low of $2,005 a tonne.

SPOT MARKETS

Crude oil (per barrel FOB)		+ or −
Dubai	$15.15-5.30q	+.275
Brent Blend	$17.63-7.62q	+.575
W.T.I. (1 pm est)	$18.62-8.65q	+0.41
Oil products (NWE prompt delivery per tonne CIF)		+ or −
Premium Gasoline	$195-197	+3
Gas Oil	$147-148	+1½
Heavy Fuel Oil	$81-83	+1
Naphtha	$158-160	+1
Petroleum Argus Estimates		
Other		+ or −
Gold (per troy oz)♣	$392.75	−0.50
Silver (per troy oz)♣	603c	+2
Platinum (per troy oz)	$541.85	+4.85
Palladium (per troy oz)	$144.00	−0.75
Aluminium (free market)	$2065	−40
Copper (US Producer)	152½-155¼	+¼
Lead (US Producer)	37.5c	
Nickel (free market)	780c	−30
Tin (European free market)	£5220	−70
Tin (Kuala Lumpur market)	24.63r	
Tin (New York)	413.5c	−1.5
Zinc (US Prime Western)	85½c	
Cattle (live weight)†	108.39p	
Sheep (dead weight)†	178.45p	
Pigs (live weight)†	81.54p	
London daily sugar (raw)	$295.4u	−0.2
London daily sugar (white)	$328.5u	−0.5
Tate and Lyle export price	£283.0	+0.5
Barley (English feed)	£115.5	
Maize (US No. 3 yellow)	£131	
Wheat (US Dark Northern)	£126.75v	
Rubber (spot)♥	57.00p	+0.5
Rubber (Apr) ♥	66.50p	+0.5
Rubber (May) ♥	67.00p	+0.5
Rubber (KL RSS No 1 Apr)	296.5m	+0.5
Coconut oil (Philippines)§	$560u	−5
Palm Oil (Malaysian)§	$407.5q	+2.5
Copra (Philippines)§	$350	
Soyabeans (US)	$199q	−1
Cotton "A" Index	65.35c	+0.90
Woottops (64s Super)	645p	

£ a tonne unless otherwise stated. p-pence/kg. c-cents/lb. r-ringgit/kg. v-Apr/May. u-Mar/Apr. q-Apr x-Feb/Mar w-Apr/Jun. †Meat Commission average fatstock prices. * change from a week ago. ♥London physical market. §CIF Rotterdam. ♣ Bullion market close. m-Malaysian cents/kg.

COCOA £/tonne

	Close	Previous	High/Low
Mar	830	835	834 827
May	842	853	850 841
Jul	847	857	854 845
Sep	850	858	855 848
Dec	861	865	868 [illegible]
Mar	863	866	866 862
May	862	871	865 861

Turnover: 4094 (4896) lots of 10 tonnes
ICCO indicator prices (SDRs per tonne). Daily price for Mar 10:1095.01 (1103.11):10 day average for Mar 13:1095.01 (1100.12).

COFFEE £/tonne

	Close	Previous	High/Low
Mar	1105	1105	1108 1095
May	1152	1164	1183 1165
Jly	1144	1144	1146 1132
Sep	1122	1120	1120 1111
Nov	1109	1105	1105 1100
Jan	1105	1100	1100
Mar	1110	1103	

Turnover: 1862 (3376) lots of 5 tonnes
ICO indicator prices (US cents per pound) for Mar 10: Comp. daily 120.55 (119.43) : 15 day average 117.41 (117.03).

SUGAR ($ per tonne)

Raw	Close	Previous	High/Low
May	274.00	268.00	274.20 268.40
Aug	274.00	267.80	273.80 267.80
Oct	270.40	266.40	270.40 264.20
Dec	269.00	265.00	265.00 259.60
Mar	264.00	257.80	260.00 257.00
White	**Close**	**Previous**	**High/Low**
May	327.00	330.00	328.00 322.00
Aug	333.00	328.00	332.00 328.00
Oct	322.50	317.50	321.50
Dec	314.00	310.00	
Mar	306.00	302.00	305.00 301.00
May	304.00	300.00	300.00

Turnover: Raw 4163 (10071) lots of 50 tonnes. White 516 (1728).
Paris- White (FFr per tonne): May 2040, Aug 2065, Oct 2010, Dec 1975, Mar 1910, May 1900.

LONDON METAL EXCHANGE TRADED OPTIONS

Aluminium (99.7%)	Calls			Puts		
Strike price $ tonne	May	Jul	Aug	May	Jul	
1850		118	120	47	86	
2050		65	77	94	140	
2150		33	46	159	206	
Copper (Grade A)	**Calls**			**Puts**		
2900		285	220	46	152	
3100		160	134	117	260	
3300		78	76	232	397	

TEA
There were 20,998 packages on offer including 6,600 offshore, reports the Tea Brokers' Association. The limited quantity of Assams on offer met fair demand but prices were easier. Best liquoring and good medium East Africans were well supported throughout at firm to dearer rates while lesser sorts opened several pence easier with many withdrawals in the early stages, but closed about steady. Central Africans showed little change. Ceylons came in for useful competition with selected lines dearer. Others generally firm. Offshore teas, nearly all from Central Africa, met good enquiry with prices mainly firm to dearer. Quotations: quality 184p (n/c), medium 107p (109p), low medium 83p (n/c).

LONDON METAL EXCHANGE (Prices supplied by Amalgamated Metal Trading)

	Close	Previous	High/Low	AM Official	Kerb close	Open interest
Aluminium, 99.7% purity ($ per tonne)						Ring turnover 15,400 tonne
Cash	2000-10	2065-70	2070/2005	2050-5		
3 months	1990-5	2040-2	2057/1990	2055-60	1995-6	29,228 lots
Copper, Grade A (£ per tonne)						Ring turnover 28,250 tonne
Cash	1895-900	1959-5	1940/1937	1936-8		
3 months	1808-10	1833-4	1838/1798	1830-1	1798-8	67,592 lots
Silver (US cents/fine ounce)						Ring turnover 0 ozs
Cash	599-602	594-7		599-602		
3 months	613-6	607-10		613-6		341 lots
Lead (£ per tonne)						Ring turnover 8,100 tonne
Cash	339-41	336-40		342-3		
3 months	346-50	348-9	351/349	350-1	349-50	6,831 lots
Nickel ($ per tonne)						Ring turnover 1,548 tonne
Cash	17000-200	17600-700	16700/16600	16600-800		
3 months	16450-500	17100-200	17000/16200	16250-350	16400-500	5,742 lots
Zinc, Special High Grade ($ per tonne)						Ring turnover 6,075 tonne
Cash	2035-40	2075-85	2075	2073-5		
3 months	1965-5	1995-6	1990/1995	1980-5	2035-45	6,586 lots
Zinc ($ per tonne)						Ring turnover 16,425 tonne
Cash	2040-55	2075-85	2080			
3 months	1995-40	1950-60	1995/1915	1940-6	1915-20	11,922 lots

POTATOES £/tonne

	Close	Previous	High/Low
Apr	65.5	65.0	67.5 65.0
May	69.4	64.5	65.0 64.0
Nov	89.0	88.5	
Feb	100.0	100.0	
Apr	129.0	128.8	129.5 128.5

Turnover 183 (70) lots of 40 tonnes.

SOYABEAN MEAL £/tonne

	Close	Previous	High/Low
Apr	165.00	164.00	165.00 162.50
Jun	155.00	155.00	155.00 153.50
Aug	150.00	150.00	150.00

Turnover 47 (59) lots of 20 tonnes.

FREIGHT FUTURES $10/index point

	Close	Previous	High/Low
Mar	1634	1650	1642 1631
Apr	1635	1684	1672 1653
Jul	1398	1441	1432 1398
Oct	1530	1573	1560 1530
Jan	1551	1580	1565 1551
Apr	1595	1613	1595
BFI	1624	1623	

Turnover 559 (303)

GRAINS £/tonne

Wheat	Close	Previous	High/Low
Mar	114.65	114.30	114.65 114.65
May	117.50	117.25	117.70 117.50
Jun	119.45	119.05	119.50 119.30
Sep	103.80	103.90	103.80
Nov	106.00	106.15	106.05 106.00
Jan	109.00	109.15	109.00
Mar	112.05	112.20	112.20 112.05
Barley	**Close**	**Previous**	**High/Low**
Mar	111.25	110.75	111.25 110.75
May	112.35	112.15	112.35 112.30
Sep	101.00	101.10	101.00
Nov	103.95	104.10	103.95
Jan	106.95	107.10	106.95

Turnover: Wheat 132 (190) , Barley 55 (70) . Turnover lots of 100 tonnes.

LONDON BULLION MARKET

Gold (fine oz) $ price		£ equivalent
Close	392½-393	225¾-226¼
Opening	393-393½	229-229¼
Morning fix	393.10	228.798
Afternoon fix	392.50	228.520
Day's high	393-393½	
Day's low	392-392½	
Coins	**$ price**	**£ equivalent**
Maple leaf	404-409	235½-238½
Britannia	404-409	235½-238½
US Eagle	404-409	235½-238½
Angel	404-409	235½-238½
Krugerrand	392-395	228½-230½
New Sov.	92¼-93¼	53¾-54¼
Old Sov.	92¼-93¼	53¾-54¼
Noble Plat	540.75-555.40	316.80-323.25

Silver fix	p/fine oz	US cts equiv
Spot	351.40	604.00
3 months	362.90	619.60
6 months	373.90	635.00
12 months	394.85	666.45

US MARKETS

IN THE METALS prices closed almost unchanged in the gold and silver as firmness in the dollar was seen, reports Drexel Burnham Lambert. After opening lower, prices remained locked in a narrow range dominated by local activity. Platinum futures fell over 4 dollars due mostly to carryover selling from Fridays soft close. New short selling by locals was seen despite much higher prices in the energy complex. Copper prices sank 510 basis points as heavy fund selling was featured. In the softs, trade activity helped rally both the sugar and cocoa markets. Coffee futures had a quiet session as price consolidation was seen. The livestock markets had mixed sessions. Pork bellies closed lower as an unexpectedly large slaughter over the weekend and increased hog runs gave the market a bearish tone, despite reports of increased user interest for cash bellies. Live cattle and hog futures both had sideways trading. In the grains, a rally in the soy complex due to heavy local buying was seen near the close. Soybeans closed up 13 basis May. Commercial buying helped firm the corn market.

CRUDE OIL $/barrel

	Close	Previous	High/Low
May	16.66	16.60	16.80 16.69
Jun	16.47	16.24	16.50 16.27
Jul	16.13	16.03	16.21 16.07
IPE Index	17.12	17.11	

Turnover: 6292 (4044)

GAS OIL $/tonne

	Close	Previous	High/Low
Apr	146.25	143.75	146.50 144.50
May	144.75	142.75	145.00 143.50
Jun	143.00	141.00	143.25 141.50
Jul	142.50	140.75	142.50 141.50
Aug	145.50	140.50	145.50 143.25
Sep	145.50	143.50	145.00
Oct	147.25	146.00	146.50
Nov	149.00	146.75	147.50 147.00
Dec	152.50	145.50	152.50

Turnover 5867 (4513) lots of 100 tonnes

New York

GOLD 100 troy oz.; $/troy oz.

	Close	Previous	High/Low
Mar	394.4	394.3	395.5 392.5
Apr	395.4	395.2	397.0 395.3
May	398.3	398.3	0 0
Jun	401.0	401.1	401.7 399.2
Aug	405.1	405.1	406.5 405.0
Oct	412.5	412.5	412.5 411.6
Dec	418.5	418.5	418.5 416.9
Feb	424.5	424.5	0 0
Apr	430.5	430.5	0 0

PLATINUM 50 troy oz; $/troy oz.

	Close	Previous	High/Low
Mar	542.4	550.0	545.0 545.0
Apr	542.4	548.5	545.0 541.0
Jul	542.4	548.5	546.5 542.0
Oct	541.7	548.5	547.0 540.0
Jan	543.2	550.0	549.0 540.0
Apr	544.7	551.5	0 0

SILVER 5,000 troy oz; cents/troy oz.

	Close	Previous	High/Low
Mar	607.8	609.8	605.5 609.0
Apr	610.2	609.2	605.5 605.5
May	616.9	615.0	617.0 609.5
Jul	627.7	628.8	629.0 621.8
Sep	639.5	638.0	635.0 633.0
Dec	655.1	654.5	658.5 649.0
Jan	661.4	659.7	0 0
Mar	672.7	670.9	668.5 668.0
May	683.9	682.2	677.5 677.5
Jul	695.2	693.6	695.0 695.0

INDICES

REUTERS (Base: September 18 1931 = 100)

Mar 10	Mar 9	mnth ago	yr ago
2005.5	1997.8	1943.3	1724.7

DOW JONES (Base: Dec. 31 1974 = 100)

Spot	138.45	137.81	134.77	128.22
Futures	142.08	141.81	137.08	131.71

COPPER 25,000 lbs; cents/lbs

	Close	Previous	High/Low
Mar	142.70	147.00	147.40 142.50
Apr	138.90	143.90	0 0
May	133.60	138.50	140.00 133.00
Jul	128.10	133.80	133.10 128.00
Sep	123.70	127.40	128.00 123.00
Dec	118.50	122.20	121.50 118.60

CRUDE OIL (Light) 42,000 US galls $/barrel

	Latest	Previous	High/Low
Apr	18.57	18.50	18.60 18.50
May	18.43	18.09	18.45 18.16
Jun	18.05	17.76	18.05 17.80
Jul	17.75	17.53	17.78 17.55
Aug	17.50	17.31	17.54 17.35
Sep	17.30	17.15	17.34 17.17
Oct	17.17	17.00	17.13 17.13
Nov	17.00	16.88	17.00 17.00
Dec	16.90	16.80	16.90 16.85
Jan	16.94	16.80	16.95 16.94

HEATING OIL 42,000 US galls, cents/US galls

	Latest	Previous	High/Low
Apr	5225	5110	5250 5140
May	5000	4910	5000 4920
Jun	4855	4773	4840 4755
Jul	4745	4703	4750 4705
Aug	4780	4700	4780 4745
Sep	4850	4785	4850 4800
Oct	4960	4880	4950 4920
Nov	5000	4930	5000 5000
Dec	5000	4930	5000 5000

COCOA 10 tonnes;$/tonnes

	Close	Previous	High/Low
Mar	1325	1325	1325 1310
May	1400	1397	1410 1387
Jul	1385	1382	1390 1365
Sep	1385	1382	1385 1370
Dec	1377	1378	1385 1360
Mar	1380	1375	1380 1370
May	1381	1373	1382 1350
Jul	1382	1380	1365 1348

COFFEE "C" 37,500lbs; cents/lbs

	Close	Previous	High/Low
Mar	134.38	135.50	135.50 134.00
May	132.63	132.86	133.25 131.80
Jul	127.41	127.50	128.00 126.50
Sep	125.09	124.80	125.25 124.50
Dec	120.55	119.50	120.25 119.70
Mar	118.75	118.50	119.00 118.50
May	117.77	117.75	0 0
Jul	118.00	118.25	0 0

SUGAR WORLD "11" 112,000 lbs; cents/lbs

	Close	Previous	High/Low
May	12.23	11.91	12.28 11.98
Jul	12.22	12.00	12.24 11.99
Oct	12.07	11.84	12.08 11.86
Jan	11.08	11.08	0 0
Mar	11.67	11.46	11.68 11.43
May	11.58	11.35	11.55 11.45
Jul	11.35	11.25	11.38 11.20

COTTON 50,000; cents/lbs

	Close	Previous	High/Low
May	61.30	61.64	61.98 61.30
Jul	62.45	62.68	62.85 62.88
Oct	63.00	62.90	63.23 62.80
Dec	63.60	63.42	63.70 63.11
Mar	63.95	63.85	63.95 63.95
May	64.20	64.18	0 0
Jul	64.50	64.45	0 0

ORANGE JUICE 15,000 lbs; cents/lbs

	Close	Previous	High/Low
Mar	144.00	142.95	144.00 143.25
May	145.90	144.35	146.20 143.70
Jul	146.75	144.20	146.00 143.70
Sep	144.80	143.20	145.00 142.70
Nov	141.10	138.85	141.25 139.50
Jan	140.25	137.40	138.00 138.00

Chicago

SOYABEANS 5,000 bu min; cents/60lb bushel

	Close	Previous	High/Low
Mar	765/4	757/0	768/0 759/0
May	782/0	769/0	783/0 769/0
Jul	791/0	778/0	792/0 778/0
Aug	784/0	771/0	785/0 773/0
Sep	760/0	750/0	762/0 750/0
Nov	747/4	740/2	750/0 740/0
Jan	754/4	748/4	758/0 747/4
Mar	761/4	752/0	761/4 756/0

SOYABEAN OIL 60,000 lbs; cents/lb

	Close	Previous	High/Low
Mar	23.07	22.90	23.10 22.80
May	23.42	23.33	23.58 23.26
Jul	23.90	23.88	24.05 23.75
Aug	24.20	24.15	24.35 24.10
Sep	24.57	24.45	24.65 24.40
Oct	24.65	24.51	24.65 24.50
Dec	24.70	24.76	25.00 24.70
Jan	24.80	24.75	24.85 24.80

SOYABEAN MEAL 100 tons; $/ton

	Close	Previous	High/Low
Mar	242.5	239.9	242.8 238.5
May	240.5	237.2	240.8 236.5
Jul	237.6	235.3	237.8 234.0
Aug	235.5	233.7	235.5 232.6
Sep	232.5	230.5	232.5 229.5
Oct	227.0	225.7	227.5 224.0
Dec	226.5	225.0	226.5 224.0
Jan	226.5	225.0	226.5 225.5

MAIZE 5,000 bu min; cents/56lb bushel

	Close	Previous	High/Low
Mar	277/0	275/4	277/2 274/6
May	280/6	278/4	281/0 277/6
Jul	282/0	279/4	282/0 279/0
Sep	277/0	276/2	277/4 275/4
Dec	270/4	269/0	271/0 268/4
Mar	278/6	277/2	279/0 276/6
May	282/4	281/4	282/4 280/4

WHEAT 5,000 bu min; cents/60lb-bushel

	Close	Previous	High/Low
Mar	439/4	436/0	440/0 436/0
May	441/6	436/6	442/0 436/0
Jul	422/0	419/0	422/0 418/0
Sep	424/0	421/0	424/0 421/0
Dec	433/0	430/4	433/4 430/0
Mar	435/0	433/0	435/0 433/0

LIVE CATTLE 40,000 lbs; cents/lbs

	Close	Previous	High/Low
Apr	78.12	78.05	78.20 77.90
Jun	74.67	74.67	74.95 74.55
Aug	72.15	72.27	72.30 72.00
Sep	71.80	72.25	72.00 71.80
Oct	71.40	71.45	71.50 71.32
Dec	72.65	72.70	72.70 72.40
Feb	72.67	72.70	72.70 72.56

LIVE HOGS 30,000 lb; cents/lbs

	Close	Previous	High/Low
Apr	43.82	45.65	45.90 45.55
Jun	48.57	48.50	48.65 48.25
Jul	48.90	48.75	48.97 48.48
Aug	47.62	47.62	47.75 47.35
Oct	44.40	44.45	44.58 44.12
Dec	45.55	45.72	45.90 45.60
Feb	45.55	45.67	45.85 45.65
Apr	44.82	44.80	44.85 44.65

PORK BELLIES 40,000 lbs; cents/lb

	Close	Previous	High/Low
Mar	38.05	38.45	38.50 37.85
May	38.00	38.37	38.85 37.80
Jul	38.15	38.52	38.90 38.10
Aug	37.52	37.55	38.05 37.25
Feb	51.67	51.70	51.70 51.25
Mar	51.00	51.60	0 0
May	52.00	52.00	S 0

LONDON STOCK EXCHANGE

Post-Crash peak ahead of the Budget

THE UK stock market advanced to a new post-Crash high yesterday, closing above FT-SE 2,100 for the first time since the eve of Black Monday, October 12, 1987, as traders anticipated a Budget Speech broadly acceptable to investors when Mr Nigel Lawson, the UK Chancellor of the Exchequer addresses the House of Commons this afternoon. London stock market analysts hope for a moderate Budget, with the accent on caution rather than on excitement.

Much of the gain in equities came near the close, when London was spurred on by a strong opening on Wall Street, and the FT-SE futures contract showed a healthy premium on the underlying stocks. Trading, slow at first, gathered pace after the UK Treasury calmed momentary concern over the unexpected rise of 2.5 per cent in UK February retail sales which, said the Treasury, left unaffected the downward trend in personal spending. Also encouraging for equities was moderation in UK producer prices – output prices added 0.3 per cent last month and input prices lost 0.2 per cent.

Account Dealing Dates		
*First Dealings:		
Feb 27	Mar 13	Apr 3
Option Declarations:		
Mar 9	Mar 30	Apr 13
Last Dealings:		
Mar 10	Mar 31	Apr 14
Account Day:		
Mar 20	Apr 10	Apr 24

*New time dealings may take place from 9.00 am two business days earlier

The FT-SE closed 17.8 up at 2,103, a closing peak for the year but a whisker behind the trading peak of 2,106 reached during the session of February 8. The equity market still has to recover around 200 FT-SE points to regain the closing level of the last session before the Crash.

Market analysts were cautious of making too much out of last night's rise in equities. Marketmakers were still concentrating on keeping trading books balanced ahead of Mr Lawson's speech.

The unexpected gain in retail sales volume was regarded as possibly unreliable in view of distortions in previous months, and unlikely to affect Budget decisions already made. Nevertheless,"there is no message to the Chancellor that he can cut rates at this stage," said Mr Peter Warburton at Robert Fleming Holdings."Rates have to stay high for a while".

Turnover yesterday was moderate, with Seaq volume of 433.6m shares comparing with 655m on Friday. Trading was selective, with Beecham recording a mere 581,000 share turnover while GEC recorded 4m.

Good interim results from Glaxo, together with a higher dividend payout, helped shares in the pharmaceutical group but had little effect elsewhere. Market indices were restrained initially as the first day of the new trading Account brought a heavy list of ex dividend quotations, including ICI, Shell, and Barclays.

While today's Budget Speech will undoubtedly set the tone for London's equity market for the near term, UK traders were impressed by Wall Street's opening strength as it moves into a week studded with important statistics on the US economy.

Glaxo payout pleases

Dealars welcomed Glaxo's interim dividend hike from 7p to 10p and pushed the stock 38 ahead to 1307p. They cast a nod of approval towards the profits, up from £397m to £460m near the top of the range of forecasts, but left the real applause to the analysts.

"Organic growth was the outstanding feature," said Mr Steve Plag, analyst at BZW. "Trading was in line with forecasts but the margins were half a point better than expected."

BZW, whose figures were already at the top of the market range, is raising its forecast for the current year from £966m to £973m, and for next year from £1,094m to £1,100m. Hoare Govett has also moved ahead to £1,100 but is telling its clients that there is scope for short-term profit-taking.

Dr Peter Woods at Warburg is even more optimistic and has increased his forecast by £60m to £1,110m. "Paul Girolami, Glaxo's chairman, has warned for two years that turnover growth would decline. It hasn't happened yet," he said.

BP a focal point

BP was easily the heaviest traded stock in the energy sector with interest stimulated by a number of factors. Firstly, there was a report that tha completion of the sale of BP's mining assets to RTZ for $4.3bn was threatened by a dispute over the Lihir island gold project on Papua New Guinea.

Secondly, it was announced yesterday that BP had completed the deal to buy back and cancel the 790m BP shares held by the Kuwait Investment Office in excess of the maximum amount (9.9 per cent) permitted by the UK authorities. And, thirdly, the market was taking an increasingly bullish stance on the stock after a positive seminar on refining and marketing given to oil company analysts last Friday by BP Oil. The chief executive of BP Oil told analysts that the outlook for BP's downstream operations worldwide were the best in his lifetime.

There was also general agreement in the market that the relationship between BP and Shell, the two giants of the oil industry in the UK, had shifted recently to the extent that BP is now looking cheap relative to Shell.

The Lihir Island worries were shrugged aside by analysts with one describing the story as "inconsequential" and another saying it represented "nothing more than political banteringahead of the negotiations; it won't prevent the sale going through."

BP "old" shares advanced 5 to 275½p on turnover of 6.3m while the "new" were 4 better at 171p on 2.8m. Shell, in exdividend form, were 1½ at 387½p on 4.5m.

Wellcome moved 15 ahead at 477p on talk that the company's anti-Aids drug Retrovir might be effective in treating cancer. However, Mr Jonathan de Pass of BZW said that there was "no basis to the rumour."

Going ex-dividend was worth a net 32 off ICI, so the stock's 17 decline to 1176p xd was a strong performance. Fisons fared rather worse, lifting just 2 to 278p, in an otherwise popular sector, on further consideration of last week's finals. The market, however, has not yet taken on board likely delays for generic competitors in the US market, according to Mr John Aldersley, analyst at Citicorp Scrimgeour Vickers. "Aerosol Intal comes off patent later this year but the FDA will not approve rivals until guidleines are published in 1990 at the earliest."

The building materials and contracting sectors were heavily bought and made sustained progress throughout the day. Traders said the sectors were among the best performers because of a general impression that it was a "one-way bet" for the budget.

Any increased spending is likely to be directed towards infrastructure and on roads, said one dealer, while a give-nothing-away budget would be taken as likely to lower interest rates, giving housebuilders a boost.

The winners in contractors and builders included John Laing (due to announce figures in April) which jumped 8 to 358p, Countryside Properties, 11 higher at 309p, and Ward Holdings which raced up 13 more to 164p. News that Fairbriar has a 5.33 per cent stake and could well take this up to 10 per cent triggered further heavy buying of J Crosby, the northern housebuilder, which advanced 13 to 138p.

Dixons rose a penny to 169p on volume of almost 7m in an otherise quiet stores sector. One marketmaker said there was caution over yesterday's rise in the retail sales figures which may have disguised another poor month for non-food high street retailing.

Glamar Group rose a further 26p to 156p following its rights issue. One trader said there was a bear squeeze as the market waited to see what Mr Stephen Barker, Glamar's new chief executive, planned.

Activity in the frontline electronics issues was much reduced ahead of the budget. But most tended to move ahead strongly late in the day, with buying stimulated by the advance on Wall Street. British Telecom were particularly sought towards the end of the day and closed 6 higher at 292p: "Catching up after the recent nnderperformance against the rest of the market," was the explanation offered by one top trader.

Thorn EMI put on 6 to 729p on 2m; the sale of the Inmos subsidiary, although long-heralded, drew sighs of relief from analysts and dealers in the shares: "It removes a major negative from the stock," said one analyst.

FKI Babcock jumped 5 to 177p, after 179p, with turnover picking up strongly to almost 5m shares. A report that details of a management buy out of the US interests are expected soon were said to be wide of the mark. "This news looks to have been leaked prematurely, the deal could take some considerable time to come to fruition and the share price may well have run ahead of the game." was the view of an industry observer.

NEI, scheduled to reveal preliminary profits in excess of £39m this morning, were 4 to the good at 141p. Dealers are expecting Rolls-Royce to renew its takeover interest after Rolls' figures, due a week tomorrow, are released.

The relentless decline in Lec Refrigeration continued with tha shares ending another 8 down at 330p.

The hotels sector moved higher on light volume led by Trust House Forte, which climbed 8¼ to 299p, and Ladbrokes, up 11 at 557p. Grand Metropolitan also strengthened on weak turnover to end 9 firmer at 557p. Mount Charlotte firmed 4 to 189p as a a result of a story that Sir Ron Brierley, the New Zealand entrepreneur, intended to increase his stake in the group.

Greenall Whitley fell 12 to 315p on the news that Greenall Holdings, which is controlled by the Greenall family, was buying 5m shares from members of the Whitley family at a price, traders said, of 293p. The effect, said one trader, was that, "Greenall Whitley becomes a very boring stock." Ha said market had been expecting to here "something good" about Greenall but it was now effectively under family control and, therefore, no longer a potential bid target.

The food sector was largely becalmed ahead of the Budget despite news that food sales had reached a record level in February. Market makers were reluctant to take this as an indication of a growing trend. One said that he believed that people were restocking following the egg and listeria scares earlier in the winter.

Cadbury Schweppes enjoyed busy trading in a generally quiet sector and closed 5p ahead at 360p xd in spite of the dividend deduction. The rise followed reports from the US that General Cinema, which owns 18.4 per cent of Cadbury, had said that it would be putting the $1.75bn proceeds from the sale of its bottling division into a war chest.

A clutch of profits figures helped miscellaneous industrial stocks find direction. British Vita revealed final pre-tax profits at £37¼m (against £28m) at rose 15 to 264p, while Gordon Russell full year profits passed £4.6m (against £2.3m) as the stock moved 6 ahead to 317p. BZW said it would be raising its profit forecasts for British Vita.

On the down side, Low and Bonar's 8 per cent profits rise was not helped by an oversupply of stock and the price slipped 9 to 258p, just above the worst of the day. Transport Development disappointed with £47m (£43¼m) and fell 17 to 245p after its recent good run.

London International benefitted from talk of a Singapore stake-builder and moved up 9 to 233p while Pilkington firmed 7 to 253p

A 14 per cent fall in full year profits to below £58m at Pentland Industries had been more than discounted.

A strong building sector and a bear squeeze boosted Trafalgar House by 15 to 390p.

Sustained speculative interest, while AJ Worthington jumped 12 to 90p.

Talk of a letter from a firm of solicitors in Ipswich to DSC shareholders added 15 to the price which closed at 77p. The letter was said to have asked for potential sellers of the stock and mentioned that a single investor was keen to build a stake.

Jaguar nudged higher throughout, although turnover was moderate, and closed 8 firmer at 333p.

P&O claimed a new peak of 723p, up 21, but the upsurge owed more to stock shortages and a squeeze on marketmakers' book positions than of further optimism over the preliminary figures, due shortly. Volume totalled only 811,000 shares.

Weekend press suggestions that Olympia and York, the Canadian property and development group, was considering mounting a bid caused the spotlight to dwell on Rosehaugh. The shares rushed forward, gaining 42 to 619p, but aroused little enthusiasm for other Properties. Among alpha stocks Land Securities rose 15 to 563p and MEPC 10 to 597p, but volume in both was light.

Citygrove jumped 17 to 237p following an increase in profits to £5.54m, well above City expectations.

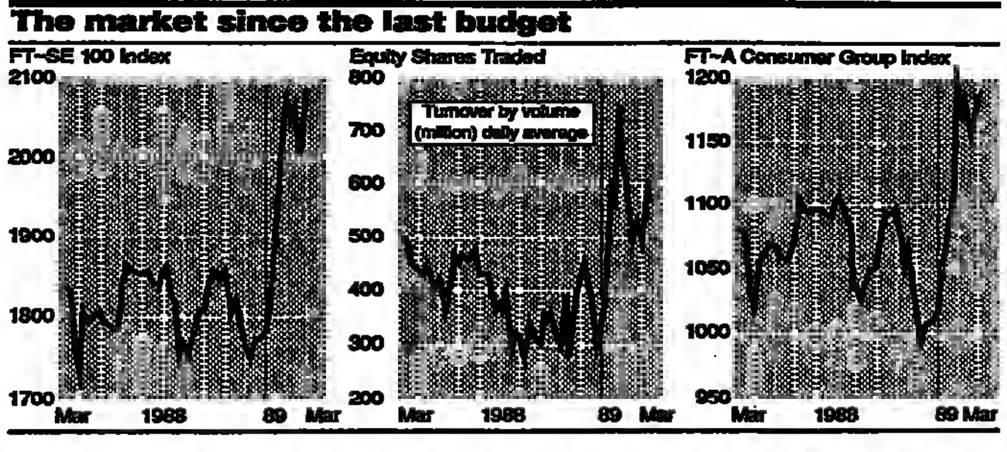
The fizz went out of the agency sector but most of the stocks involved in last week's excitement held their gains, Clarke Hooper and More O'Ferrall, both recent Citicorp recommendations, continued to enjoy support and the former rose 8 to 178p while the latter gained 6 to 344p. The securities house said of Clarke Hooper: "Start to accumulate at these levels" for prospects are good.

Dealers spoke of good retail demand for United Newspapers after fresh hints that Sir James Goldsmith was showing interest in the group. The shares shot higher, closing 11 up at 464p, helped by the absence of sellers.

An impressive leap in annual profits coupled with a scrip issue put Candover Investments 26 higher at 568p while further consideration of last week's excellent figures swept Antofagasta to a best-ever 410p, a rise of 26 on the session.

■ Other market statistics, including FT-Actuaries Share Index and London Traded Options, Page 30

The market since the last budget



NEW HIGHS AND LOWS FOR 1988/89

NEW HIGHS (223).
BRITISH FUNDS (4) AMERICANS (2) Bell Atlantic, Chase Manhattan, CANADIANS (1) Gt. Pacific Res., BANKS (2) Anglo Leasing, Rothschild (J.), BREWERS (4) Fuller S.T.A., Guinness, Do. 8¼pc Ln., Marston Thompson, BUILDINGS (18) CHEMICALS (5) STORES (1) Glamar Grp., ELECTRICALS (21) ENGINEERING (15) FOODS (8) HOTELS (6) INDUSTRIALS (46) AGA AB, Alexandra W'kwear, Antler, Astra AB, BIMEC Ids., BTR, Bardsey, Boots, Brammer, British Airways, British Vita, Cape Inds., Channel Express, Christies Int'l., Clayhithe, Computer People, Cooper (A.), Elkem, Gordon Russell, Glaxo, Grampian Hldgs., Green E. & Part., Hawthorn Leslie, Hampson 6.5pc Pf., ISA Int'l., Macfarlane Grp., Nestor-BNA, PCT Grp., Portals, Rockwood Hldgs., Do. 8½pc Pf., Russell (A.), Security Servs., Smith Inds., Tinsley (E.), Toothill (R.W.), Trafalgar House, Williams (J.), Wolseley, Worthington (A.J.), LEISURE (7) Border TV, European Leis., LWT, Medminster, Saga Grp., TV-am, Yorkshire TV, MOTORS (1) Western Motor, NEWSPAPERS (4) Adscene, Daily Mail "A", Johnston Press, Quarto Grp., PAPERS (6) PROPERTY (6) Bilton (P.), Control Secs., Marler Ests., Merlin Int'l. Prop., Power Corp., Southend Prop., SHIPPING (2) TRUSTS (36) OILS (3) Conrroy Pet. Nat. Res., Hunting P.S., Premier Cons., OVERSEAS TRADERS (1) Antofagasta, MINES (3) Bond Int'l. Gold, Gencor, Impala Plat., Jo'burg, Vaasa S.A., THIRD MARKET (3).
NEW LOWS (8).
BANKS (1) Sumitomo Bank, STORES (1) Sock shop Int'l., INDUSTRIALS (2) Mainmet, Medical Resch., TEXTILES (1) Smallshaw (R.), MINES (3) Independent Res., Jason Mining, Roodeport Gold.

FINANCIAL TIMES STOCK INDICES

	Mar 13	Mar 10	Mar 9	Mar 8	Mar 7	Year Ago	1988/89 High	1988/89 Low	Since Compilation High	Since Compilation Low
Government Secs	88.69	88.75	88.78	88.57	88.84	90.78	91.43 (18/4/88)	86.18 (14/12/88)	127.4 (9/1/35)	49.18 (3/1/75)
Fixed Interest	99.20	99.35	99.25	99.30	99.12	97.21	99.26 (10/3/89)	94.14 (9/1/89)	105.4 (28/11/47)	50.53 (3/1/75)
Ordinary	1738.4	1724.9	1714.1	1724.4	1715.6	1450.0	1739.4 (13/3/89)	1349.0 (9/2/88)	1926.2 (16/7/87)	49.4 (26/6/40)
Gold Mines	192.1	187.8	181.6	180.5	174.7	245.3	312.5 (7/1/88)	154.7 (17/2/89)	734.7 (15/2/83)	43.5 (26/10/71)
Ord. Div. Yield	4.37	4.39	4.42	4.40	4.37	4.44				
Earning Yld %(full)	10.62	10.70	10.81	10.75	10.70	11.30				
P/E Ratio(Net)(*)	11.37	11.29	11.18	11.24	11.31	10.79				
SEAQ Bargains(5pm)	32,069	36,147	32,354	33,035	38,423	27,592				
Equity Turnover(£m)†	-	1422.49	1149.60	1280.01	1255.34	1075.05				
Equity Bargains†	-	40,658	35,984	37,270	40,344	31,423				
Shares Traded (ml)†	-	607.4	491.9	558.1	608.2	425.3				

Ordinary Share Index, Hourly changes

Opening	10 a.m.	11 a.m.	12 p.m.	1 p.m.	2 p.m.	3 p.m.	4 p.m.
1721.9	1722.7	1725.5	1723.3	1725.8	1726.3	1729.8	1735.8

DAY'S HIGH 1739.4 DAY'S LOW 1721.5

Basis 100 Govt. Secs 15/10/26, Fixed Int. 1928, Ordinary 1/7/35, Gold Mines 12/9/55, SE Activity 1974. ✱Nil 11.30 †Excluding intra-market business.

● S.E. ACTIVITY

Indices	Mar 10	Mar 9
Gilt Edged Bargains	104.4	110.8
Equity Bargains	283.4	233.2
Equity Value	2675.2	2321.6
5-Day average		
Gilt Edged Bargains	113.1	118.3
Equity Bargains	248.4	243.9
Equity Value	2530.8	2336.6

● London Report and latest Share Index: Tel. 0898 123001

TRADING VOLUME IN MAJOR STOCKS

The following is based on trading volume for most Alpha securities dealt through the SEAQ system yesterday until 5 pm.

Stock	Volume 000's	Closing Price	Day's change	Stock	Volume 000's	Closing Price	Day's change	Stock	Volume 000's	Closing Price	Day's change	Stock	Volume 000's	Closing Price	Day's change
[illegible]															

APPOINTMENTS

Senior post at Simon's Equipment

■ Mr J.M. Felker has been appointed managing director of SIMON'S EQUIPMENT sub-group with responsibility for manufacturing companies in the UK and US. He also becomes vice president of Simon United States Holdings. A US citizen, he will be based in Cincinnati, and joins from the Varity Corporation, Toronto, where he was a senior vice president.

■ Mr Colin Buckthorp has been promoted to director, sales, for Europe, Far East and South America in the chemical catalyst group of ENGELHARD. He also assumes worldwide marketing responsibility for fats and oils, catalysts and sorbents.

■ BASS has appointed Mr Geoffrey Mulcahy as a non-executive director from April 5. He is group chief executive of Woolworth Holdings.

■ MELLON BANK has appointed Mr John P. O'Driscoll as general manager of its London branch. He will continue to have direct responsibility for capital markets activities at the branch.

■ Mr Alun Jones has been appointed managing director of HIGHFIELD INTERNATIONAL. He was chief executive international of DHL Worldwide Express.

Mr Geoff Gray *(above)* has been appointed managing director, TSB UNIT TRUSTS AND OFFSHORE, Andover, following a reorganisation. He was TSB Trust Company divisional manager, overseas business.

■ CNA REINSURANCE OF LONDON has appointed Mr David Trace as director of finance and administration; Mr Harvey Simons, a director, as senior underwriter; Mr Graham Lyons as company actuary; and Ms Gilda Moncur and Mr Jerry Dowlen as assistant directors.

■ BARNEYS ADVERTISING, Bristol, has appointed Mr David Sutton as business development director. He was managing director of Brunnings, Birmingham.

■ Lord Brougham and Vaux has been appointed chairman of the TAX PAYERS' SOCIETY.

■ Mr R.M. Bond has been promoted to eastern regional director, HIGGS AND HILL HOMES; and Mr M.P.G. Hickford has been promoted to southern regional director.

■ The following appointments have been made in subsidiaries in TARMAC's properties division. Mr Graham Pickering becomes a director of Farmcote developments; Mr Michael Horner a director of Tarmac Swindon; and Miss Fiona Thompson a director of Blue Lamp Properties.

■ TRY CONSTRUCTION has promoted Mr Barry Luckett and Mr Alan Dunn to assistant managing directors.

■ LOW & BONAR has appointed as executive directors Mr Jim Leng, chief executive of UK/European packaging and plastics division; and Mr Garth McKenzie, chief executive of the North American packaging and plastics division.

■ Mr Stewart Hicks has been appointed managing director of the Ashby-de-la-Zouch based Transmitton Group, part of BICC Technologies. He was managing director of Dorman Smith Switchgear.

■ GARTMORE INVESTMENT MANAGEMENT has appointed Mr George W. Long as managing director of Gartmore (Hong Kong). Mr James Filmer Wilson will be non-executive chairman. Mr Long has been representative and senior analyst for W.I. Carr (Overseas) in Seoul.

■ Mr H.W. Uhlig, European sales manager of Inco Europe, has been elected chairman of the COPPER DEVELOPMENT ASSOCIATION.

Mr Richard A. Gilleland *(above)* has been appointed non-executive chairman of AMI HEALTHCARE GROUP, London, following the resignation of Mr Gene E. Burleson. Mr Gilleland is chairman and chief executive officer of American Medical International Inc., which owns 65 per cent of AMI Healthcare.

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AUTHORISED UNIT TRUSTS

	Init Chrge	Canc. Price	Bid Price	Offer Price	+ or -	Yield Gr's
Abbey Unit Tst Mngrs (1200)H						
80 Holdenhurst Rd, Bournemouth 0345 717373						
High Income						
American Income	5	43.18	47.18xd	50.46	-0.02	5.43
Gilts & Fixed Int	6	112.30	112.30xd	119.30	-0.2	8.38
High Inc Equity	6	130.70	133.90	142.40	-0.2	4.18
Worldwide Bond	6	186.90	186.90xd	198.10	-0.4	4.99
Capital Growth						
American Growth	6	159.80	159.80	171.00	+0.5	1.28
Asian Pacific	5	82.92	82.92	88.69	-0.27	1.22
Assets & Earnings	6	159.90	163.80	174.20	+3.5	2.27
Capital Reserve Acc	0	83.65	83.65	83.67	....	4.78
Comdty & Energy	6	97.29	97.29xd	104.10	-0.2	0.00
1992 Enterprise	6	54.89	55.94	59.51	+0.18	3.02
European Capital	6	77.42	77.42	82.81	+0.03	0.91
General	5	172.40	172.40xd	184.40	+0.2	2.44
Japan	5	102.60	104.40	111.00	-1.1	0.00
Mastertrust	6	79.83	79.83	85.38	-0.02	1.72
UK Growth Acc	6	199.70	208.00	221.20	+6.6	1.54
UK Growth Dist	6	134.05	139.50	148.40	+5.8	2.30
US Emerging Cos	6	46.58	46.50	49.82	+0.36	0.00
Income & Growth	6	288.60	295.30	314.10	-0.6	3.02
Ethical	6	48.27	49.50	52.65	+0.18	2.37
Abtrust Management Ltd (1000)H						
10 Queens Terrace, Aberdeen AB9 1QJ 0800 833580						
American	6¼	43.49	43.49	46.42	+0.02	1.70
Australian	5¼	22.41	22.41	23.93	-0.03	1.18
European	5¼	52.61	52.61	56.16	-0.17	0.00
Extra Income	5	42.40	42.40xd	45.01	-0.07	4.92
Fund Inc Tst	5	118.3	110.3	126.3	+0.10	1.98
Do Accum	5	180.3	180.5	192.5	+0.20	1.99
Buckmaster Mangmt Co Ltd (1200)H						
The Stock Exchange, London EC2P 2JT 01-588 2868						
Emerging Grth	5	66.19	67.91	72.05	+0.33	1.50
(Accum Units)	5	67.14	68.89	75.09	+0.34	1.50
Fellowship Tst	5	64.54	64.54	68.25	+0.21	1.29
(Accum Units)	5	65.70	65.70	69.30	+0.22	1.29
General Inc	5	304.70	312.1	331.1	....	2.30
(Accum Units)	5	506.8	519.0	550.7	....	2.30
Income	5	155.6	160.9	170.7	-0.5	3.73
(Accum Units)	5	297.4	307.4	326.2	-1.0	3.73
International	5	115.0	115.0	121.6	....	3.07
(Accum Units)	5	156.8	156.8	165.8	-0.1	3.07
Smaller Co's	5	111.4	114.5	121.3	+0.9	0.97
(Accum Units)	5	121.9	125.1	132.7	+1.0	0.97
Inc Portfolio	2½	53.37	56.35	57.06	+0.56	3.59
(Accum Units)	2½	54.34	56.36	58.10	+0.58	3.59
High Income Port	3	48.37	48.57	50.33	....	7.00
Burrage Unit Tst Mangmt Ltd (0905)F						
117 Fenchurch St, London EC3M 5AL 01-480 7216						
Sh Dul Gilt & FI	1¼	52.16	52.16xd	52.93	....	1.37
CCL Unit Trusts Ltd (1400)F						
74 Shepherds Bush Green, W12 8SD 01-740 7070						
UK General Tst	5½	54.34	55.25	59.09	+0.24	2.70
Global Tst	5½	40.29	40.50	43.31	-0.08	2.50
Recovery Tst	5½	55.26	57.52xd	61.19	-0.27	2.61
CIBC Unit Tst Managers plc (1200)H						
Cottons Ctr, Cottons Lane, Ldn. SE1 2QL 01 234 6000						
Growth Fd Acc	5	105.7	107.3	113.0	+0.5	3.49
CS Fund Managers Limited (1000)H						
125 High Holborn, London WC1V 6PY 01-242 1148						
CS America	5	53.08	53.68	57.10	+0.31	0.43
CS International	5	53.53	53.53	56.94	-0.04	1.79
CS Japan	5	118.7	118.7	126.2	-1.6	0.39
CS Portfolio Inv ‡	5	70.28	70.28xd	74.76	-0.07	1.92
Canada Life Unit Tst Mngrs Ltd (1200)F						
2-6 High St, Potters Bar, Herts 0707 51122						
Can Gen Dist	5	137.1	142.4xd	149.9	+0.10	2.86
Do Gen Accum	5	228.7	237.5	250.0	+0.10	2.86
[illegible]						

GUIDE TO UNIT TRUST PRICING

[illegible]

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Windsor Trust Mngrs Ltd (1200)F
83 Kingsway, London, WC2B 6SD 01-405 8331

	Init Chrge	Canc. Price	Bid Price	Offer Price	+ or -	Yield Gr's
Convid & Equity	5	63.86	66.28	70.51	-0.05	5.72
European	5	58.59	59.50	63.09	+0.19	0.52
Far Eastern	5	54.38	54.77	58.27	+0.08	1.10
Growth Inc	5	89.29	92.55	98.45	+0.70	1.56
Growth Acc	5	89.29	92.55	98.45	+0.70	1.56
Income Inc	5	84.45	85.99	91.48	+0.82	5.57
Income Acc	5	84.45	85.99	91.48	+0.82	5.57
Property Share	5	55.37	55.87	59.51	+0.21	1.19
Smaller Co's	5	60.56	63.82	67.89	+0.43	1.51
Formerly ABC Trust Managers Ltd						
Nth American	5	53.54	53.54	57.25	—	1.03
International	5	42.16	42.16	45.09	—	1.46

Wright Seligman Fund Mngrs Ltd (1000)H
11 Blomfield St, London EC2M 7AY 01-588 8592

Growth	5	94.04	94.04	98.04	—	3.85

Weekly dealing day Tuesday

The Yorkshire Unit Tst Mngrs Ltd (1100)F
Woodsome Pk, Fenay Bdge, Huddersfield 0484 602250

Yorkshire General	5¼	61.86	64.14	68.23	+0.27	3.07
YUTM Gt Eqy Inc Tst	5¼	59.74	61.67	65.61	+0.05	4.50
YUTM Intl Grth Tst 4	5¼	46.22	46.22	49.36	+0.0	2.12

OTHER UK UNIT TRUSTS

Baillie Gifford & Co Ltd
Int'l Expt Feb 15 ..... 420.8 445.3 — –

Cent. Bd. of Fin. of Church of England
2 Fore Street, London EC2Y 5AQ 01-588 1815
Inv Fund Feb 28 ..... 465.80 — 4.48
Fxd Int Sec Feb 28 ..... 142.55 — 10.09
Deposit Feb 28 ..... 100.00 — 12.56

Charities Official Invest. Fund
2 Fore Street, London EC2Y 5AQ 01-588 1815
Income Feb 28 ..... 460.59 — 5.06
Accum Feb 28 ..... 1403.07 — –

Edinburgh Fund Mngrs PLC
Exempt Funds
American Mar 8 ..... 123.4 126.8 +4.7 1.78
Managed Mar 8 ..... 126.6 131.3 +4.1 2.27
Japan Mar 9 ..... 135.1 138.8 -0.3 0.16
Pacific Mar 10 ..... 394.8 405.7 -2.3 0.21
Sm Jap Cos Mar 10 ..... 263.5 270.7 -4.6 0.10

Fidelity Investment Services Ltd

Allied Dunbar Assurance Plc
Allied Dunbar Ctr, Swindon SN1 1EL 0793 514514

	Bid Price	Offer Price	+ or -	Yield Gross
Fixed Int. Dep. Acc.	256.1	269.6	+0.2	—
Equity Acc.	818.3	861.4	+1.9	—
Property Acc.	482.9	508.4	+0.1	—
Far East Acc.	192.8	203.0	-0.1	—
European Acc.	20.4	21.5	—	—
Managed Acc.	647.3	681.4	+1.4	—
Managed Cap.	368.6	388.1	+0.7	—
O'seas Earnings Acc.	548.3	577.2	+1.7	—
Gilt Edged Acc.	316.5	333.2	-0.1	—
American Equity Acc.	404.3	425.6	—	—
American Man Acc.	188.8	198.8	+0.1	—
American Prop Acc.	137.5	144.8	—	—
Pen. F.I. Dep. Cap.	281.6	296.5	+0.1	—
Pen. F.I. Dep. Acc.	478.3	503.5	+0.5	—
Pen. Prop. Cap.	568.4	598.4	+0.1	—
Pen. Prop. Acc.	1065.8	1121.9	+0.2	—
Pen. Man. Cap.	796.1	838.1	+0.2	—
Pen. Man. Acc.	1492.2	1570.8	+1.7	—
Pen. Gilt Edg. Cap.	315.4	332.0	-0.1	—
Pen. Gilt Edg. Acc.	483.0	508.5	—	—
Pen. Eq. Cap.	1303.7	1372.4	+1.1	—
Pen. Eq. Acc.	1852.1	1949.6	+2.3	—
Pen. Am. Eq Cap.	128.7	135.5	+0.2	—
Pen. Am. Eq Acc.	154.0	162.2	+0.1	—
Pen. Far East Cap.	228.2	240.3	-0.1	—
Pen. Far East Acc.	273.3	287.7	-0.1	—
Pen. Euro Cap.	23.0	24.3	+0.1	—
Pen. Euro Acc.	24.8	26.2	+0.1	—
Pen. B.S. Acc.	521.7	547.8	+0.6	—
Pen. B.S. Cap.	315.8	331.6	+0.2	—
Pen. D.A.F. Acc.	366.1	366.1	+0.4	—
Pen. D.A.F. Cap.	240.8	240.8	+0.2	—
Pen. Mortgage Cap.	141.1	148.6	+0.1	—
Pen. Mortgage Acc.	169.0	177.9	+0.2	—
Barings Funds				
Pen Eqy Cap.	27.3	28.8	—	—
Pen Eqy Acc.	28.2	29.7	—	—
Pen Am Eq Cap.	28.3	29.8	+0.1	—
Pen Am Eq Acc.	29.1	30.7	+0.1	—
Pen Far East Cap.	28.4	29.9	-0.1	—
Pen Far East Acc.	29.2	30.8	-0.2	—
Pen Euro Cap.	30.4	32.6	-0.2	—
Pen Euro Acc.	32.0	33.7	-0.2	—
James Capel Funds				
Pen Eqy Cap.	28.2	29.7	—	—
Pen Eqy Acc.	29.0	30.6	—	—
Pen Am Eq Cap.	28.2	29.7	-0.1	—
Pen Am Eq Acc.	29.0	30.6	-0.3	—
Pen Far East Cap.	28.2	29.7	—	—
Pen Far East Acc.	29.1	30.7	+0.2	—
Pen Euro Cap.	28.1	29.6	—	—
Pen Euro Acc.	29.0	30.6	+0.1	—

INSURANCES

Continued on next page

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MANAGEMENT SERVICES

OFFSHORE AND OVERSEAS

GUERNSEY (SIB RECOGNISED)

IoM (SIB RECOGNISED)

LUXEMBOURG (SIB RECOGNISED)

SWITZERLAND (SIB RECOGNISED)

BERMUDA AUTHORISED

GUERNSEY (**)

JERSEY (**)

JERSEY (SIB RECOGNISED)

FT UNIT TRUST INFORMATION SERVICE

ISLE OF MAN (**)

LUXEMBOURG (**)

OFFSHORE INSURANCES

OTHER OFFSHORE FUNDS

LONDON SHARE SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

1988/89 High	Low	Stock	Price £	+ or –	Yield Int.	Red.
101	98	Treas 9½pc Cnv 1989	99	.....	[illegible]	11.92
98	95	Treas 3pc 1989	98	.....	[illegible]	9.80
102	98	Treas 10½pc 1989	99	.....	[illegible]	12.54
102	98	Exch. 10pc 1989	99	.....	[illegible]	12.53
103	98	Exch 11pc 1989	99	.....	[illegible]	12.30
97	94	Treas 5pc 1986–89	97	.....	5	10.16
104	98	Exch 10¼pcCv '89	99	.....	[illegible]	11.04
107	100	Treas 13pc 1990‡‡	100	.....	[illegible]	11.78
104	99	Exch 11pc 1990‡‡	99	.....	[illegible]	11.75
107	100	Exch. 12¼pc 1990	100	.....	12	11.74
93	90	Treas. 3pc 1990	93	.....	[illegible]	9.51
99	95	Treas 8¼pc 1987–90‡‡	96	.....	8	11.30
102	95	Treas. 8pc Cv 1990 ‡‡	97	–	8	9.93
103	97	Treas. 10pcCv 1990	97	–	10	11.48
91	87	Exch 2½pc 1990	89	–	2.79	9.17
107	100	Treas 11¾pc 1991	100	.....	11.67	11.30
95	89	Funding 5¾pc '87–91‡‡	91	–	6.28	10.37
90	86	Treas. 3pc 1991	88	.....	3.40	9.11
105	97	Treas 10pc Cv '91 ‡‡	98	.....	10.12	10.58
107	98	Exch. 11pc 1991	100	–	11.00	10.99
98	91	Treas. 8pc 1991	93	.....	8.59	10.93
113	103	Treas 12¾pc 1992‡‡	105	–	12.14	10.66
104	96	Treas 10pc 1992	98	–	10.18	10.71
98	91	Treas. 8pc 1992 ‡‡	93	–	8.60	10.72
105	98	Treas 10½pc Cv 1992‡‡	99	.....	10.54	10.63
86	81	Treas. 3pc 1992	84	–	3.56	8.64
112	102	Exch. 12¼pc '92	104	–	11.73	10.68
117	106	Exch 13½pc 1992	108	–	12.47	10.60
97	91	Treas 8¾pc 1993	92	–	[illegible]	10.52
105	96	Treas 10pc 1993‡‡	98	–	[illegible]	10.38
115	105	Treas 12½pc 1993‡‡	107	–	11.6	10.42
93	85	Funding 6pc 1993‡‡	87	–	[illegible]	9.55
121	110	Treas 13¾pc 1993‡‡	112	–	12	10.40
101	90	Treas. 8½pc 1994	93	–	[illegible]	10.37
125	113	Treas 14½pc 1994‡‡	116	.....	[illegible]	10.25

Five to Fifteen Years

1988/89 High	Low	Stock	Price £	+ or –	Yield Int.	Red.
120	109	Exch 13½pc 1994	112½	–	12	10.40
105	96	Treas. 10pc Ln. 1994‡‡	99	–	10	10.17
116	106	Exch. 12½pc 1994	108	–	[illegible]	10.38
101	92	Treas 9pc 1994‡‡	95	–	9	10.11
114	104	Treas 12pc 1995	107	.....	[illegible]	10.34
83	76	Exch 3pc Gas 90–95	77	.....	3	7.78
106	97	Exch. 10¼pc 1995	100	–	[illegible]	10.23
120	109	Treas 12¾pc 1995‡‡	112	.....	11	10.20
126	114	Treas. 14pc '96	117	–	11.9	10.35
101	92	Treas. 9pc 1992–96‡‡	96	–	9	9.81
133	122	Treas 15¼pc 1996‡‡	124	–	[illegible]	10.26
123	112	Exch 13¼pc 1996‡‡	115	–	11	10.23
105	96	Conversion 10pc 1996	99	–	[illegible]	10.10
124	113	Treas 13¼pc 1997‡‡	116	–	11.41	10.20
108	99	Exch 10½pc 1997	102	–	10.28	10.09
98	90	Treas 8¾pc 1997‡‡	93	–	9.36	9.89
134	123	Exch 15pc 1997	126	–	11.89	10.33
104	95	Exch. 9¾pc 1998	98	–	9.88	9.90
87	80	Treas 6¾pc 1995–98‡‡	83	–	8.12	9.56
140	129	Treas. 15½pc '98‡‡	132	–	11.73	10.16
118	108	Exch. 12pc 1998	111	–	10.75	10.08
103	95	Treas 9½pc 1999‡‡	98	–	9.65	9.73
120	110	Exch. 12¼pc 1999	113	–	10.78	10.06
109	100	Treas. 10½pc 1999	103	–	10.15	9.95
107	99	Conversion 10¼pc 1999	102	–	10.04	9.92
100	86	Treas. 8½pc Ln 2000‡‡	92	–	9.22	9.68
99	92	Conversion 9pc 2000‡‡	95	–	9.44	9.69
126	116	Treas. 13pc 2000	119	–	10	10.05
106	98	Treas 10pc 2001	101	–	9	9.74
129	119	Treas. 14pc '98–01	121	–	[illegible]	10.27
104	97	Conversion 9¾pc 2001	100	–	9	9.71
118	108	Exch. 12pc '99–02	111	–	10	10.10
107	99	Conversion 10pc 2002	102	–	9	9.63
105	97	Treas 9¾pc 2002	101	–	9	9.58
99	92	Exch. 9pc 2002	95	–	9	9.53
131	121	Treas. 13¾pc 2000–03	124	–	[illegible]	10.09
108	100	Treas 10pc 2003	103	–	9	9.50

Over Fifteen Years

BRITISH FUNDS—Contd

Undated

Index-Linked

Prospective real redemption rate on projected inflation of (1) 10% and (2) 5%. (b) Figures in parentheses show RPI base month for indexing, i.e. 8 months prior to issue and have been adjusted to reflect rebasing of RPI to 100 in January 1987. Conversion factor 3.945. RPI for June 1988: 106.6 and for January 1989: 111.0

INT. BANK AND O'SEAS

CORPORATION LOANS

COMMONWEALTH & AFRICAN LOANS

LOANS

Building Societies

Public Board and Ind.

FOREIGN BONDS & RAILS

AMERICANS

1988/89 High	Low	Stock	Price £	+ or –	Div Gross	C'vr	Y'ld Gr's
30¼	22½	Abbott Laboratories‡	30¼	.....	$1.20	–	2.2
649p	340p	♦Allegheny & W 1c	583p	.....	30c	–	3.3
15	862p	Amex $1	14¼	–	40c	–	1.6
15	8	Amdahl 5c	10¼	+	10c	–	0.5
31	22	Amer. Cyanamid $5	28½	.....	$1.20	–	2.3
18	11	Amer. Express 60c	17¼	–	84c	–	2.7
10	668p	Amer. Medical Int. $1	10	.....	72c	–	3.7
18	13	American T. & T. $1	27	+	$1.20	–	3.7
30	22	Ameritech $1	29½	.....	$2.92	–	5.5
For Anheuser-Busch see Beers, Wines & Spirits							
12	3	BankAmerica $1	12½	–½	60c	–	2.7
24	16	Bankers N.Y. $1	22	+	$2.08	–	5.1
43	34	Bell Atlantic $1	43	+	$4.08	–	5.2
25	19	BellSouth Corp.	24	.....	$2.36	–	5.4
13	850p	♦Bethlehem Steel $8	14½	–	–	–	–
13	801p	♦Bio-Rad Labs. A	10	+	–	–	–
23	14	Bowater Inc.	16	–	$1.12	–	3.9
13	787p	Brunswick 75c	9	–	44c	–	2.5
33	21	CPC Intnl. 25c	29	+	$1.60	–	3.0
19	13	CSX $1	18	.....	$1.24	–	3.7
590p	89p	California Engy	590p	.....	–	–	–
20	12	Campbell Soup 15c	18	–	92c	–	2.7
19	11	Chase Manhattan $12½	19	+	$2.36	–	6.8
19	11	Chem. Banking Corpn.	37	–	$2.72	–	8.4
16	11	Chrysler $6¼	14	–	$1.20	–	9.4
16	9	Citicorp $1	15½	.....	$1.48	–	5.4
297p	167p	CityFed Fid. Corp.	182p	+6	4c	–	1.2
20	20	Colgate-Palmolive $1	26	+	$1.48	–	3.0
21	13	Cons Freightways 62½c	17	+	98c	–	3.0
14	530p	Cont'l Bank Corp $4	11	.....	8c	–	0.4
14p	6½p	Cont Illinois Hldgs $1	7¼p	.....	–	–	–
428p	117p	♦Corporate Data Scnce	327p	.....	–	–	–
510p	234p	Cullinet Sftwr 1c	305p	.....	–	–	–
22	17	Dana Corp. $1	22	–	$1.60	–	3.9
15	943p	Data General	10	.....	–	–	–
32	24½	Dun & Bradstreet $1	28	.....	$1.74	–	3.3
49	27	Eaton Corpn. 50c	34¼	–	$2.00	–	3.2
10	8	Echlin Inc.	9	–	59c	–	3.9
18	14	FPL Group 1c	17¼	.....	$2.20	–	7.1
32	20	Ford Motor $1	29½	–	$3.00	–	5.6
33	20	GATX 62½c	31	–	$2.00	–	3.5

Continued on next page

Money Market Trust Funds

Money Market Bank Accounts

UNIT TRUST NOTES

LONDON SHARE SERVICE

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CANADIANS

1988/89 High	Low	Stock	Price £	+ or −	Div Gross	C'vr	Y'ld Gr's
309p	130p	♥48 M Gold Corp ‡	139p	.....	–	–	–
32p	4½p	♥Abbot Energy Corp	17p	.....		–	–
14¼	882p	♥Amer. Barrick Res.	15¼	.....		–	–
10p	2½p	♥Amer. Lightwave ‡	2½p	.....		–	–
47p	7¼p	♥Anmeco	18½p	.....		–	–
125p	83p	♥Asiamerica ‡	100p	.....		–	–
76p	23p	♥Azgmitto Expln.	27½p	−½		–	–
14⅝	10⅝	Bk. Montreal ‡	13⅞	+⅛	$2.12	–	7.3
769p	514p	Bk. Nova Scot. ‡	729p	.....	84c	–	5.5
18¼	15¼	BCE ‡	17¾	.....	$2.44	–	6.6
723p	527p	♥Bow Valley ‡	717p	−6	♦40c	–	2.7
14¼	10½	♥Brascan ‡	15⅛	−⅛	88c	–	3.2
328p	177p	♥Breakwater Res.	211p	.....	10c	–	2.3
13¼	801p	Can. Imp Bank ‡	13½	.....	$1.16	–	4.2
12¼	841p	Can. Pacific ‡	£1⅛	+⅛	76c	–	1.2
41½	38½	Do. 4pc Deb £100	38½	.....	4%	–	10.4
515p	357p	Central Capital "4" ‡	430p	.....		–	–
485p	313p	♥Corona Corp.	437p	+13		–	–
886p	228p	♥Cons TVX Min	352p	+13		–	–
371p	20p	♥Danbus Mem. Syst. ‡	20p	.....		–	–
686p	430p	♥Derlan Inds. ‡	616p	+10	11.75c	–	0.9
14¼	746p	♥Echo Bay Mines	935p	+14	$0.07	–	0.4
839p	249p	♥ECO Corp ‡	430p	.....		–	–
40p	9½p	♥Energex Minerals ‡	11½p	.....		–	–
386p	196p	♥Galactic Resources	221p	.....		–	–
423p	267p	Gandall Techs. Inc.	272p	.....		–	–
125p	34p	♥Geodome Res.	34p	.....		–	–
394p	141p	Granges Expln ‡	160p	−5		–	–
27½p	4½p	♥Gt Pacific Res.	27½p	+2		–	–
903p	576p	♥Gulf Canada ‡	729p	−18	52c	–	3.4
12¼	816p	♥Hawker Sid Can ‡	11⅞	−⅛	$1.08	–	4.3
590p	344p	♥Henlys Group	492p	+19		–	–
12½	785p	♥Hudson's Bay ‡	12½	+¼	60c	–	2.5
28¾	20¼	♥Imperial Oil ‡	25⅞	+⅛	$1.80	–	3.4
20⅞	10⅞	Inco ‡	18¼	−⅛	s$0.80	–	2.4
718p	462p	♥Inland Nat. Gas $1	626p	−4	60c	–	4.6
250p	100p	♥Madeleine Mines	150½p	+2½		–	–
207p	126p	♥Muscocho Expln.	189p	+5		–	–
245p	85½p	♥Nevada Goldfields	119p	−7		–	–
11½	787p	♥Rio Algom	11¼	−¼	$1.30	–	5.6
19½	11½	Royal Bk. Can. ‡	19¼	.....	$2.20	–	5.5
40⅞	26¼	Seagram ‡	39¼	−¼	US$1.40	–	2.0
361p	74½p	♥Sonora Gold Corp ‡	102p	+3		–	–
121p	18p	♥Spiral Eng ‡	77p	+4		–	–
150p	35p	♥Taro Pure Tech. Corp ‡	77½p	−6½		–	–
19¼	11¼	Toronto-Dom. Bk. ‡	19½	.....	$1.12	–	2.8
746p	566p	♥Trans Can Pipe	717p	−6	68c	–	4.6
205p	127p	Varity Corp ‡	165p	−2	8	–	–

BANKS, HP & LEASING

1988/89 High	Low	Stock	Price	+ or −	Div Net	C'vr	Y'ld Gr's	P/E
*278	124	ANZ SA1	263	+1	s034½c	2.0	6.0	8.4
*293	180	Allied Irish	293	+2	F072.9%	3.1	5.2	10.1
£13¼	£10⅞	Algemene Fl.10	£11¼	−¼	Q27%	1.9	6.5	–
73	58	Anglo Irish	73	.....	Q1.69%	1.2	6.2	20.8
90	64	Ansbacher (H.) 1p	76	.....	2.0	–	3.5	–
£52½	£28¾	B'caire Cie Fr100	£45½	−⅞	g010%	–	2.0	–
£40¾	£24¾	Banco Bilbao Viz.	£39¾	.....	Q35.7%	♦	3.1	♦

[illegible]

Hire Purchase, Leasing, etc.

[illegible]

BEERS, WINES & SPIRITS

[illegible]

BUILDING, TIMBER, ROADS

[illegible]

BUILDING, TIMBER, ROADS — Contd

[illegible]

CHEMICALS, PLASTICS

[illegible]

DRAPERY AND STORES

[illegible]

ELECTRICALS

[illegible]

ENGINEERING

[illegible]

ENGINEERING — Contd

[illegible]

FOOD, GROCERIES, ETC

[illegible]

HOTELS AND CATERERS

[illegible]

INDUSTRIALS (Miscel.)

[illegible]

INDUSTRIALS (Miscel.) — Contd

[illegible]

INDUSTRIALS (Miscel.) — Contd.

[illegible]

INSURANCES

[illegible]

LEISURE

[illegible]

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LEISURE—Contd

1988/89 High	Low	Stock	Price	+ or –	Div Net	C'vr	Y'ld Gr's	P/E
[illegible]	70	HTV Grd.	124	......	h3.9	3.6	4.2	8.9
[illegible]	45	Harimex A$0.25	178	+1	Q15c	4.7	3.9	5.4
[illegible]	112	Hi-Tec Sports	121	......	L3.6	3.4	4.0	8.8
[illegible]	13	Int'l Media Cons. 5p	17	–½	—	—	—	—
[illegible]	49	Juliana's Hldgs 2p	74	......	†2.85	1.4	5.1	16.2
[illegible]	32	Kunick 10p	57	......	1.4	2.4	3.3	16.1
[illegible]	122	LWT 5p	211	+1	5.7	2.6	3.6	13.6
[illegible]	68	Leisure Inv 10p	110	......	1.75	1.4	2.1	(33.6)
[illegible]	64	Leisuretime Int 10p	91	......	—	—	—	—
[illegible]	235	Marina Dev 50p	487	–8	2.0	3.5	0.5	96.2
[illegible]	156	Mecca Leisure 10p	197	+2	5	●	3.0	●
[illegible]	79	Medminster 10p	130	+3	5.67	2.6	5.8	13.8
[illegible]	110	Metro Radio Grp 5p	196	......	L3.0	2.3	2.0	22.6
25[illegible]	126	Midsummer Leis 10p	245	......	2.8	3.1	1.5	26.2
525	200	Miss World 10p	515	......	8.0	2.6	2.1	25.1
62	30	Mollage Vision 50p	31	......	—	—	—	—
*147	112	Noble Raredon 5p	127	......	g1.33	1.5	1.4	33.3
187	87	Orient Ex Hds $0.125	167	......	—	—	—	—
89	61	Owners Abroad 3p	85	+5	2.35	●	3.7	●
142	112	Pavilion Leisure 10p	137	+2	—	—	—	—
332	59	P'dilly Radio NV5p	318	+1	3.25	2.6	1.4	37.9
264	175	Pickwick	218	+1½	3.25	●	2.0	●
150	113	Prestwich	121	+½	†1.25	7.5	1.4	12.9
144	78	Prism Leisure 10p	144	......	4.46	2.6	4.1	12.2
*254	122	Quadrant Group 10p	230	......	F3.6	3.4	2.1	19.6
510	97	Radio City 'A' NV	505	......	6.0	4.2	1.6	19.9
331	89	Radio Clyde	330	......	5.75	2.9	2.3	20.0
615	494½	Really Useful Grp 5p	607	......	15.0	2.3	3.3	17.8
280	169	Saga Group 20p	279	......	25.75	1.2	2.7	50.6
110	76	Scot. Ice Rink 2½p	84	......	—	—	—	—
468	343	Scott. TV 10p	463	......	17.0	3.0	5	9.2
20½	10	SelecTV 10p	16½	......	—	—	—	—
*269	174	Stanley Leisure	262	–4	3.6	3.8	1.8	19.0
302	85	Sunset & Vine 5p	278	+2	2.4	2.9	1.2	33.6
81	62	TSW 5p	80	......	3.15	2.6	5.3	9.8
208	129	TV-am 5p	208	+3	4.5	3.6	2.9	12.9
362	286	TVS Entertain 10p	345	......	13.25	2.1	5.1	9.2
116	96	Do. 7.4pc Prf.	114	+1	7.4%	—	8.7	—
506	302	Thames TV	491	–2	†13.2	3.0	3.6	12.3

MOTORS, AIRCRAFT TRADES

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING, ADVERTISING

PROPERTY

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TEXTILES—Contd

TOBACCOS

TRUSTS, FINANCE, LAND

Investment Trusts

TRUSTS, FINANCE, LAND—Contd

Finance, Land, etc

OIL AND GAS

OIL AND GAS—Contd

OVERSEAS TRADERS

PLANTATIONS

Rubbers, Palm Oil

Teas

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Diamond and Platinum

Central African

Finance

Australians

MINES—Contd

Tins

Miscellaneous

THIRD MARKET

NOTES

REGIONAL & IRISH STOCKS

The following is a selection of Regional and Irish stocks, the latter being quoted in Irish currency.

IRISH

TRADITIONAL OPTIONS

3-month call rates

Industrials

Property

Oils

Mines

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CURRENCIES, MONEY AND CAPITAL MARKETS

FOREIGN EXCHANGES

Dollar and French franc firm

THE DOLLAR and French franc were firm, while the D-Mark weakened and sterling finished below the day's highs in Europe yesterday.

The D-Mark was not helped by news that the ruling Conservative Party lost control of Frankfurt in local elections, or by the boost provided to the Government in Paris from the result of French municipal elections at the weekend.

The D-Mark fell below a technical support point of FFr3.39, following a large commercial selling order against the French franc. It closed at FFr3.3860 in Paris, compared with FFr3.3915 on Friday. The franc strengthened within the European Monetary System.

Last Friday's US employment data for February provided support for the dollar, while the pound suffered a little late nervousness ahead of today's UK Budget.

Tomorrow's US trade figures are the main feature of the week for the dollar. There may be some confusion however because only the customs cleared figures will be released for January. These are expected to show little change from the December deficit of $10.2bn. On the old basis the December shortfall was $11.9bn.

Friday's announcement that US unemployment was at its lowest level of 15 years lent support to the dollar, on speculation that a strong economy may push the Federal Reserve into tightening its monetary policy. On the other hand the market was nervous of central bank intervention if the dollar continues to rise.

The US currency broke through a technical support point of DM1.8650, and closed at DM1.8670, compared with DM1.8625 on Friday. It also rose to Y129.85 from Y129.45; to SFr1.5965 from SFr1.5920; and to FFr6.3250 from FFr6.3175. On Bank of England figures the dollar's index was unchanged at 67.8.

Sterling held steady for most of the day at around $1.7175 and DM3.2025, but lost some ground in the late afternoon.

UK economic news was also somewhat mixed, with February retail sales rising more than generally forecast, but producer prices for the same month broadly in line with expectations.

The figure on retail sales caused a slight upturn in London interest rates, reacting to fears the economy is not slowing, *although this may have been a case of paying too much attention to the headline figure.*

This showed a sharp rise of 2.5 per cent in February, against an expected gain of around 0.4 per cent, but the Department of Trade and Industry stressed the erratic nature of the data and said the increase in February was a rebound from the 2.4 per cent fall in January.

Sterling fell 30 points to $1.7125, and declined to FFr10.8325 from FFr10.8375, but rose to DM3.1975 from DM3.1950; to Y222.25 from Y222.00; and to SFr2.7350 from SFr2.7300.

£ IN NEW YORK

Mar.13	Latest	Previous Close
£ Spot	1.7180-1.7190	1.7175-1.7185
1 month	0.48-0.47pm	0.42-0.39pm
3 months	1.39-1.36pm	1.16-1.12pm
12 months	3.72-3.65pm	3.15-3.05pm

Forward premiums and discounts apply to the US dollar

STERLING INDEX

	Mar.13	Previous
8.30 am	96.0	96.1
9.00 am	96.0	96.1
10.00 am	96.0	96.1
11.00 am	96.0	96.0
Noon	96.0	96.0
1.00 pm	96.0	96.0
2.00 pm	95.9	95.9
3.00 pm	95.9	95.9
4.00 pm	95.9	95.8

CURRENCY RATES

Mar.13	Bank rate %	Special* Drawing Rights	European Currency Unit
Sterling	-	0.760499	0.649738
U.S Dollar	7	1.31034	1.11625
Canadian $	11.54	1.57070	1.33704
Austrian Sch.	4	17.1236	14.6463
Belgian Franc	7.75	50.9919	43.5868
Danish Krone	7½	9.48883	8.11402
Deutsche Mark	4	2.43356	2.08181
[illegible]	[illegible]	[illegible]	[illegible]

*All SDR rates are for Mar.10

CURRENCY MOVEMENTS

Mar.13	Bank of England Index	Morgan Guaranty Changes %
Sterling	95.9	-15.9
U.S. Dollar	67.8	-10.5
Canadian Dollar	101.7	-1.3
Austrian Schilling	106.5	+9.7
Belgian Franc	105.0	-4.9
Danish Krone	102.9	-2.6
Deutsche Mark	112.4	+20.4
Swiss Franc	107.8	+17.3
Guilder	109.9	+12.9
French Franc	71.6	-15.5
Lira	97.3	-20.3
Yen	149.4	+84.4

Morgan Guaranty changes: average 1980-1982=100. Bank of England Index (Base Average 1985=100). *Rates are for Mar.10

OTHER CURRENCIES

[illegible]

*Selling rate

EMS EUROPEAN CURRENCY UNIT RATES

	Ecu central rates	Currency amounts against Ecu Mar.13	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	42.4582	43.5868	+2.66	+0.83	±1.5344
Danish Krone	7.85212	8.11402	+3.34	+1.51	±1.6404
German D-Mark	2.05853	2.08181	+1.13	-0.70	±1.0981
French Franc	6.90403	7.05247	+2.15	+0.32	±1.3674
Dutch Guilder	2.31943	2.34892	+1.27	-0.56	±1.5012
Irish Punt	0.768411	0.778851	+1.36	-0.47	±1.6684
Italian Lira	1483.58	1527.03	+2.93	+1.83	±4.0752

Changes are for Ecu, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

POUND SPOT- FORWARD AGAINST THE POUND

Mar.13	Day's spread	Close	One month	% p.a.	Three months	% p.a.
US	1.7115 - 1.7210	1.7120 - 1.7130	0.43-0.40cpm	2.91	1.16-1.11pm	2.65
Canada	2.0485 - 2.0595	2.0515 - 2.0525	0.26-0.15cpm	1.20	0.49-0.32pm	0.79
Netherlands	3.60¼ - 3.61¼	3.60¼ - 3.61¼	2-1¾cpm	6.44	5¼-5⅛pm	5.75
Belgium	66.75 - 67.20	66.90 - 67.00	30-25cpm	4.93	80-72pm	4.54
Denmark	12.44½ - 12.49¼	12.45¼ - 12.46¼	5½-5orepm	5.06	14¼-13¾pm	4.47
Ireland	1.1925 - 1.1990	1.1945 - 1.1955	0.58-0.53pm	5.57	1.47-1.37pm	4.75
W. Germany	3.19¼ - 3.20½	3.19½ - 3.20	2-1¾pfpm	7.27	5-4¾pm	6.18
Portugal	262.00 - 264.30	262.00 - 263.00	32-4cpm	0.78	74-2pm	0.58
Spain	198.45 - 199.60	198.60 - 198.90	30-19cpm	1.48	36-21pm	0.57
Italy	2342 - 2351¼	2344 - 2345	2-parlirepm	0.51	3-1pm	0.34
Norway	11.62 - 11.67	11.63¼ - 11.64¼	2-1¼orepm	1.87	5½-4¾pm	1.78
France	10.81¼ - 10.86¼	10.82¼ - 10.83¼	4-3¼cpm	4.29	10-9¾pm	3.62
Sweden	10.92½ - 10.96	10.93¼ - 10.94¼	1¾-1¼orepm	1.99	4¾-4¼pm	1.69
Japan	221¾ - 223¼	221¾ - 222¾	1¾-1½pm	8.44	4¾-4¼pm	8.10
Austria	22.43 - 22.55	22.47 - 22.50	13¾-12¼gropm	6.90	37¼-33¼pm	6.27
Switzerland	2.73 - 2.74	2.73 - 2.74	1¾-1¼cpm	7.95	4¾-4¾pm	6.86

Belgian rate is convertible francs. Financial franc 67.10-67.20. Six-month forward dollar 2.03-1.98cpm 12 months 3.15-3.05pm

DOLLAR SPOT- FORWARD AGAINST THE DOLLAR

Mar.13	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	1.7115 - 1.7210	1.7120 - 1.7130	0.43-0.40cpm	2.91	1.16-1.11pm	2.65
Ireland†	1.4305 - 1.4345	1.4310 - 1.4320	0.35-0.40cdis	-3.14	0.90-1.00dis	-2.65
Canada	1.1965 - 1.1990	1.1980 - 1.1990	0.15-0.19cdis	-1.70	0.53-0.59dis	-1.87
Netherlands	2.1020 - 2.1075	2.1065 - 2.1075	0.64-0.61cpm	3.57	1.68-1.64pm	2.87
Belgium	38.95 - 39.15	39.05 - 39.15	7.50-6.00cpm	2.08	20.00-17.00dis	1.90
Denmark	7.26 - 7.28	7.27½ - 7.28	1.42-1.23orepm	2.19	3.55-3.15pm	1.84
W. Germany	1.8620 - 1.8675	1.8665 - 1.8675	0.65-0.62pfpm	4.09	1.68-1.64pm	3.56
Portugal	153½ - 154	153½ - 154	20-40cdis	-2.34	65-105dis	-2.21
Spain	115.75 - 116.15	116.05 - 116.15	13-17cdis	-1.55	59-64dis	-2.12
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

† UK and Ireland are quoted in US currency. Forward premiums and discounts apply to the US dollar and not to the individual currency. Belgian rate is for convertible francs. Financial franc 39.15-39.25.

EURO-CURRENCY INTEREST RATES

[illegible]

Long term Eurodollars: two years 10¼-10⅛ per cent; three years 10¼-10⅛ per cent; four years 10¼-10⅛ per cent; five years 10¼-10⅛ per cent nominal. Short term rates are call for US Dollars and Japanese Yen; others, two days' notice.

EXCHANGE CROSS RATES

[illegible]

Yen per 1,000: French Fr. per 10: Lira per 1,000: Belgian Fr. per 100.

FINANCIAL FUTURES

Prices recover from weak start

STERLING BASED futures yesterday showed a muted response to the February data on UK retail sales and producer prices. Most investors are unwilling to make any key decisions until digesting the content's of the UK Budget.

This suggests that any measured response is likely to be postponed until tomorrow, given that the speech by Mr Lawson, the Chancellor, will continue until close to the end of futures trading in London.

The June short-sterling contract opened at 87.11 and slipped to a low of 87.03 on the rise in retail sales, before coming back to close at 87.06 compared with 87.09 on Friday.

US Treasury bond futures came back from earlier lows to finish unchanged on the day. Nevertheless, the contract remains on the defensive, with investors less than encouraged by continued signs of strong economic growth in the US.

Prices may now be held in a holding pattern as the authorities try to stabilise prices.

LIFFE LONG GILT FUTURES OPTIONS

[illegible]

LIFFE US TREASURY BOND FUTURES OPTIONS

[illegible]

LIFFE FT-SE INDEX FUTURES OPTIONS

[illegible]

LIFFE £/$ OPTIONS

[illegible]

LIFFE EURODOLLAR OPTIONS

[illegible]

LIFFE SHORT STERLING

[illegible]

PHILADELPHIA SE £/$ OPTIONS

[illegible]

LONDON SE £/$ OPTIONS

[illegible]

LONDON (LIFFE)

[illegible]

CHICAGO

[illegible]

EUROPEAN OPTIONS EXCHANGE

[illegible]

TOTAL VOLUME IN CONTRACTS : 31,916

A=Ask B=Bid C=Call P=Put

MONEY MARKETS

Quiet but cautious

UK INTEREST rates were only a shade firmer in places yesterday despite a surprise increase in UK retail sales in February. A rise of 2.5 per cent contrasted sharply with a market median forecast of a 0.4 per cent increase. But sales data are renowned for following an erratic month to month path, and the year-on-year rise of 4 per cent is the lowest since March 1987.

UK clearing bank base lending rate 13 per cent from November 25

Data on input and output prices presented a reassuring picture. Output costs rose by just 0.3 per cent in February while input prices fell by 0.2 per cent. This suggests that inflation is relatively subdued at the factory gate level, and that the high interest rate policy being pursued by the authorities is beginning to have an effect.

The key three-month interbank rate was quoted at 13⅛-12⅞ per cent compared with 13⅛-12⅞ per cent on Friday, while the one-year rate stayed at 12⅞-12¾ per cent.

The Bank of England forecast a shortage of around £500m. Factors affecting the market included bills maturing in official hands and a take up of Treasury bills, together with repayment of late assistance draining £620m. Exchequer transactions accounted for a further £365m. These were partly offset by a fall in the note circulation of £470m and banks' balances brought forward £20m below target.

The Bank gave assistance in the morning of just £15m through outright purchases of eligible bank bills in band 1 at 12⅞ per cent. A revision to the forecast took the shortage to around £450m, and the authorities gave additional help in the afternoon of £403m. This comprised outright purchases of £72m of eligible bank bills in band 1 and £331m in band 2, all at unchanged rates. Total help came to £418m.

Short term money in Frankfurt hovered just below the 6 per cent Lombard rate as funds started to leave the market to meet corporate tax payments. The trend in money rates for the rest of this week largely depends on the terms of the Bundesbank's next sale and repurchase agreement - details of which are due today. A total of DM11.6bn will be drained tomorrow as a previous facility matures. But any drain on liquidity, as a result of a smaller allocation, is unlikely to put upward pressure on key lending rates, and the Bundesbank is not expected to announce any changes after a meeting of the central council scheduled for this Thursday.

FT LONDON INTERBANK FIXING

(11.00 a.m. Mar.13) 3 months US dollars		6 months US Dollars	
bid 10⅝	offer 10¾	bid 10⅝	offer 10¾

The fixing rates are the arithmetic means rounded to the nearest one-sixteenth, of the bid and offered rates for $10m quoted by the market to five reference banks at 11.00 a.m. each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

MONEY RATES

[illegible]

LONDON MONEY RATES

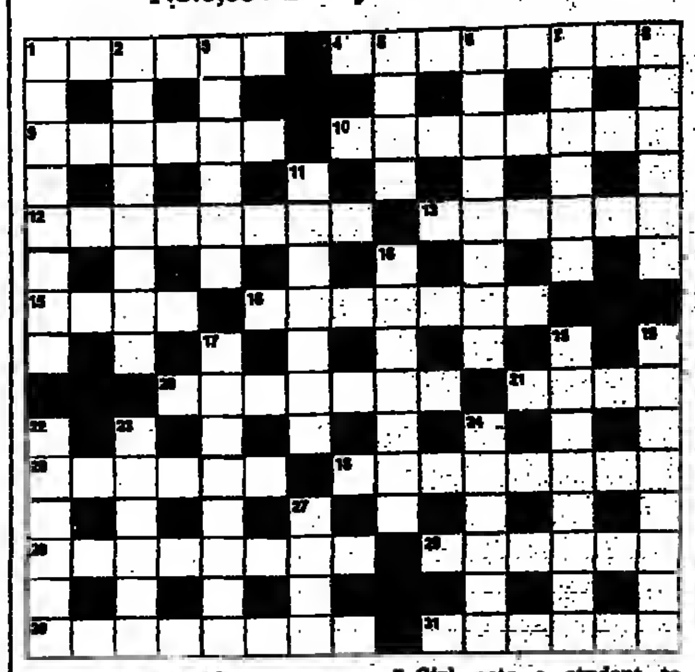
[illegible]

BASE LENDING RATES

[illegible]

CROSSWORD

No.6,884 Set by TANTALUS



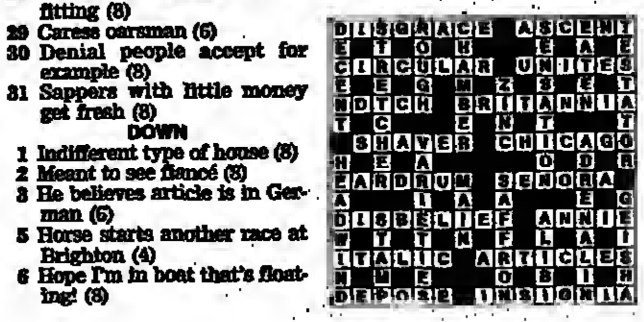
ACROSS

1 Delicate cake (6)
4 Artists return to an ensemble to dance (8)
9 Inside Houdini's crate there is a rope (6)
10 Surgeon noticed mortal remains (8)
12 Is flower able to produce tobacco? (8)
13 Way fliers go to the east to bombard (6)
15 Still level (4)
16 Last month put silver on figure (7)
20 Male cut out peace-pipe (7)
21 Thanks, but time off is forbidden! (4)
25 New priest shows spirit (6)
26 Offhand supporter of Charles I (8)
28 You heard I enter stall for fitting (8)
29 Caress oarsman (6)
30 Denial people accept for example (8)
31 Suppers with little money get fresh (6)

DOWN

1 Indifferent type of house (8)
2 Meant to see fiancé (8)
3 He believes article is in German (6)
5 Horse starts another race at Brighton (4)
6 Hope I'm in boat that's floating! (8)
7 Girl gets a student to toughen with heat (6)
8 Pannier with many rare roses (6)
11 About to go to meeting place for income (7)
14 Tom near to trouble with Highland robber (7)
17 French Canadian gives clothes to worker (8)
18 Prohibit one discordant note by singer (8)
19 Feeding teacher at interchange (8)
22 The French lad has classwork (6)
23 Jump well (6)
24 Move on board to view fortress (6)
27 Change oil love to prepare this dish (4)

Solution to Puzzle No.6,883



JOTTER PAD

COMPANY NOTICES

WORLD STOCK MARKETS

AUSTRIA · BELGIUM/LUXEMBOURG · DENMARK · FINLAND · FRANCE · GERMANY · ITALY · JAPAN · NETHERLANDS · NORWAY · SPAIN · SWEDEN · SWITZERLAND · SOUTH AFRICA · AUSTRALIA · HONG KONG · SINGAPORE

[illegible]

CANADA

TORONTO
4pm prices March 13

[illegible]

MONTREAL
4pm prices March 13

[illegible]

Total Sales 1,872,274 shares.

INDICES

NEW YORK DOW JONES

	Mar 13	Mar 10	Mar 9	Mar 8	1988/89 High	1988/89 Low	Since compilation High	Since compilation Low
♦Industrials	2306.25	2282.14	2291.43	2295.54	2347.14 (7/2/89)	1879.14 (20/1/88)	2722.42 (25/8/87)	41.22 (2/7/32)
Home Bonds	87.97	87.95	88.15	88.26	91.25 (3/3/88)	86.12 (4/1/88)	—	—
Transport	1060.96	1064.20	1066.14	1059.18	1087.97 (7/2/89)	737.57 (21/1/88)	1101.16 (14/8/87)	12.32 (8/7/32)
Utilities	182.91	182.37	182.91	183.20	192.15 (24/1/89)	167.26 (20/4/88)	227.83 (22/1/87)	10.50 (8/4/32)

♦Day's High 2319.64 (2295.54) Low 2282.68 (2261.61)

STANDARD AND POOR'S	Mar 13	Mar 10	Mar 9	Mar 8	1988/89 High	1988/89 Low	Since compilation High	Since compilation Low
Composite ‡	295.32	292.88	293.93	294.08	299.63 (7/2/89)	242.63 (20/1/88)	336.77 (25/8/87)	4.40 (1/6/32)
Industrial	341.24	338.17	339.43	339.81	346.41 (7/2/89)	277.86 (20/1/88)	393.17 (25/8/87)	3.62 (21/6/32)
Financial	26.90	26.69	26.79	26.70	27.24 (7/2/89)	21.51 (8/1/88)	32.43 (25/8/87)	8.64 (1/10/74)
NYSE Composite	166.00	164.85	165.36	165.45	168.02 (7/2/89)	136.72 (20/1/88)	187.99 (25/8/87)	4.46 (25/4/42)
Amex Mkt. Value	330.54	328.92	329.36	329.15	330.54 (10/3/89)	262.76 (12/1/88)	365.01 (13/8/87)	29.31 (9/12/72)
NASDAQ OTC Comp	406.56	405.90	405.67	406.40	409.19 (7/2/89)	331.97 (12/1/88)	455.28 (26/8/87)	54.87 (31/10/72)

	Mar 10	Mar 3	Feb 24	year ago (approx.)
Dow Industrial Div. Yield	3.70	3.70	3.75	3.38
	Mar 8	Mar 1	Feb 22	year ago (approx.)
S & P Industrial div. yield	3.16	3.23	3.18	2.93
S & P Indl. P/E ratio	13.04	12.68	13.48	15.41

TRADING ACTIVITY † Volume Millions

	Mar 13	Mar 10	Mar 9
New York	141.048	146.830	143.160
Amex	13.158	12.012	13.260
OTC	(u)	133.369	142.062

NEW YORK	Mar 13	Mar 10	Mar 9
Issues Traded	1,935	1,930	2,956
Rises	865	598	686
Falls	566	835	744
Unchanged	504	497	526
New Highs	66	34	56
New Lows	13	13	20

CANADA

TORONTO	Mar 13	Mar 10	Mar 9	Mar 8	1988/89 High	1988/89 Low
Metals & Minerals	3466.1	3499.7	3485.2	3501.2	3564.9 (6/2/89)	2238.7 (8/2/88)
Composite	3637.1	3631.3	3638.0	3632.5	3696.1 (8/2/89)	2977.9 (8/2/88)
MONTREAL Portfolio	(u)	1798.36	1805.30	1806.25	1850.44 (8/2/89)	1505.06 (27/1/88)

NEW YORK ACTIVE STOCKS

Monday	Stocks traded	Closing price	Change on day		Stocks traded	Closing price	Change on day
First Interstate x	3,358,800	45¼	+ ⅜	Hospital Corp	2,640,700	49	− ⅜
AT&T	2,431,800	31⅞	+ 1⅛	Pac Gas & Elect	1,468,400	17⅞	− ⅛
K Mart	1,973,100	40	+ ⅛	Philip Morris	1,455,800	118¾	+ 3⅛
CNW Corp	1,832,200	38¾	− ⅞	IBM	1,427,400	118⅞	+ ⅝
Stokley	1,674,800	47⅞	+ 9⅛	Exxon	1,337,200	44⅞	+ ⅜

Base values of all indices are 100 except NYSE All Common—50; Standard and Poor's—10; and Toronto Composite and Metals — 1000. Toronto indices based 1975 and Montreal Portfolio 4/1/83. † Excluding bonds. ‡ Industrial, plus Utilities, Financial and Transportation. (c) Closed. (u) Unavailable.

	Mar. 13	Mar. 10	Mar. 9	Mar. 8	1988/89 High	1988/89 Low
AUSTRALIA						
All Ordinaries (1/1/80)	1490.8	1488.8	1486.5	1491.7	1657.8 (9/8/88)	1170.7 (10/2/88)
All Mining (1/1/80)	694.9	693.2	693.9	695.2	847.8 (9/8/88)	532.4 (10/2/88)
AUSTRIA						
Credit Aktien (30/12/84)	258.21	255.01	255.18	254.57	258.21 (13/3/89)	163.98 (11/2/88)
BELGIUM						
Brussels SE (1/1/80)	5695.47	5689.1	5708.96	5736.07	5834.01 (10/2/89)	3608.35 (4/1/88)
DENMARK						
Copenhagen SE (3/1/83)	285.09	283.24	282.93	284.10	291.83 (10/2/89)	180.68 (4/1/88)
FINLAND						
Unitas General (1975)	791.5	786.3	784.0	782.7	791.5 (13/3/89)	530.60 (15/1/88)
FRANCE						
CAC General (31/12/82)	437.7	439.4	439.0	439.7	457.1 (3/2/89)	251.3 (29/1/88)
Ind. Tendance (30/12/88)	101.7	102.8	102.9	102.4	108.1 (3/2/89)	97.5 (27/2/89)
GERMANY						
FAZ Aktien (31/12/58)	552.20	555.83	554.02	553.24	569.27 (8/2/89)	396.40 (29/1/88)
Commerzbank (1/12/53)	1643.8	1654.7	1649.1	1647.2	1705.6 (5/1/89)	1207.9 (29/1/88)
DAX (30/12/87)	1313.55	1318.51	1319.42	1317.77	1371.10 (5/1/89)	931.18 (28/1/88)
HONG KONG						
Hang Seng Bank (31/7/64)	3029.89	3046.81	3062.79	3058.65	3209.96 (9/2/89)	2223.56 (8/2/88)
ITALY						
Banca Com. Ital. (1972)	577.90	582.51	580.28	582.13	615.89 (17/1/89)	423.91 (9/2/88)
JAPAN						
Nikkei (16/5/49)	31552.96	31701.78	31656.45	31837.6	32452.49 (23/2/89)	21217.04 (4/1/88)
Tokyo SE (Topix) (4/1/68)	2392.89	2408.24	2403.61	2421.70	2490.07 (8/2/89)	1690.44 (4/1/88)
NETHERLANDS						
CBS Ttl. Rtn. Gen. (End 1983)	224.7	223.4	223.7	223.3	224.7† (13/3/89)	208.3† (3/1/89)
CBS All Shr (End 1983)	179.7	178.7	178.9	178.7	179.7† (13/3/89)	166.7† (1/3/89)
NORWAY						
Oslo SE (4/1/83)	587.75	585.34	587.75	585.04	598.14 (7/3/89)	327.78 (28/1/88)
SINGAPORE						
Straits Times Ind. (30/12/66)	1160.38	1154.86	1150.76	1136.96	1177.87 (8/8/88)	833.60 (4/1/88)
SOUTH AFRICA						
JSE Gold (28/9/78)	1573.0	1585.0	1539.0	1534.0	1585.0 (10/3/89)	1154.0 (4/5/88)
JSE Industrial (28/9/78)	2329.0	2343.0	2337.8	2342.0	2343.0 (10/3/89)	1387.0 (12/2/88)
SPAIN						
Madrid SE (30/12/85)	278.68	276.16	274.32	273.28	301.63 (15/6/88)	225.50 (4/1/88)
SWEDEN						
Jacobson & P. (31/12/56)	3834.10	3825.50	3822.96	3814.40	3834.10 (13/3/89)	2148.5 (4/1/88)
SWITZERLAND						
Swiss Bank Ind. (31/12/58)	646.6	648.0	647.9	645.5	652.1 (22/2/89)	466.6 (13/1/88)
WORLD						
M.S. Capital Intl. (1/1/70)	(u)	501.9	503.1	506.2	519.8 (9/2/89)	401.0 (21/1/88)

♦ Subject to official recalculation. † 1989 High & Low.

Base values of all indices are 100 except Brussels SE and DAX — 1,000 JSE Gold — 255.7 JSE Industrials — 264.3 and Australia, All Ordinary and Mining — 500; (c) Closed. (u) Unavailable.

TOKYO - Most Active Stocks
Monday 13 March 1989

	Stocks Traded	Closing Prices	Change on day		Stocks Traded	Closing Prices	Change on day
Mitsui Mining & Smelting	29.7m	860	+15	Sumitomo Heavy Ind	12.0m	1,070	-10
Mitsui Eng & Shipbdg	28.1m	864	+7	Hitachi Zosen	11.7m	728	+18
Sanyo Special Steel	20.6m	1,200	+90	Kawasaki Kisen	10.1m	655	+5
Fujita	19.1m	1,910	+40	Sanyo Electric	10.0m	860	-4
Kobe Steel	16.4m	865	-10	Kawasaki Steel	9.3m	934	+9

NOTES — Prices on this page are as quoted on the individual exchanges and are last traded prices. (u) Unavailable. § Dealings suspended. xd Ex dividend. xc Ex scrip issue. xr Ex rights. xa Ex all.

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

4pm prices March 13

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
		— A — A — A —								
29⅝	21⅞	AAR	.44	1.6	16	70	28	27⅝	21⅞	+ ⅛
19¾	8½	ACM s	1.01	12.		257	8⅞	8¾	8¾	− ⅛
12	10¼	ACMIn	1.26a	12.		399	10⅝	10½	10⅝	
10⅛	8½	ACM M	s1.61	11.		213	8⅞	8¾	8⅞	
12	10¼	ACM Sc	1.20	12.		626	10⅝	10½	10½	
10½	8½	ACMSp	n.05e	9.4		508	9	8⅞	9	
8⅛	8⅝	AMCA	.12e	3.1		7	9⅞	3⅞	3⅞	− ½
8⅛	3⅛	AM Intl				1743	8⅛	3⅝	3⅝	− ⅛
23⅛	18¼	AM Intl pf	2	8.8		54	27⅞	22⅞	22⅞	
68¼	36	AMR			8	2245	81¼	80¼	68¼	− ¼
24½	20	ANR pf	2.12	9.2		9	23¼	23½	23½	
9½	4⅞	ARX				149	5⅛	8¼	3¼	− ⅛
47½	35¼	ASA	3a	7.1		556	42½	41⅞	42	− ⅝
20¼	14¼	AVX	.24	1.3	9	26	18	17⅞	18	
68⅞	42⅞	AbtLab	1.20	2.3	18	4454	52¾	52	52⅛	+ ¼
28¼	15¾	Abitibi g	1			56	16½	16⅜	16½	
18⅞	7½	AcmeC	.40	3.8		320	10⅛	10⅝	10⅝	
8⅝	3⅞	AcmeE	.32	4.6	25	81	7⅛	7	7⅛	
30⅛	25¼	Acuson			24	230	27⅞	27½	27½	− ½
16⅞	14½	AdaEx	1.82e	12.		325	14⅝	14⅝	14⅝	
18⅞	7¼	AMD			19	1379	8¼	8¼	8¼	+ ⅛
43½	26¼	AMD pf	3	9.4		2	32	28	32	
8½	8½	Adobe				16	7½	7⅜	7½	+ ⅛
18½	18½	Adob pf	1.84	11.		2	17	17	17	
9¼	5⅞	Advest	.12	1.7	18	425	7⅛	7	7	− ½
38½	38½	AetnLf	2.76	6.8	6	986	50	48⅝	48⅞	+ ⅛
44½	24	AhPb s	.80	1.8		410	43½	42⅞	42½	+ ⅛
18¾	13¾	Ahmans	.88	5.2	8	1413	18⅞	16⅝	16⅞	+ ⅛
[illegible]										

[illegible]

Continued on Page 45

NYSE COMPOSITE PRICES

Continued from previous Page

12 Month High	12 Month Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
29⅛	17	RayRay	.76	2.7	14	x228	28½	27⅞	28¼	+ ¼
62¼	40⅛	ReyMtl	1.80	2.9	6	3087	55⅛	54⅛	54⅞	− ½
46⅞	29⅛	RiteAid	.82	2.4	15	748	34	33⅝	33⅝	− ⅝
1	6-16	RvrOak				16	11-32	11-32	11-32	+ 1-32
16½	8⅝	Robtsn				46	16½	10⅜	10½	+ ⅛
28⅝	21⅞	vjRobins			11	638	27⅞	27	27⅞	+ ⅞
18⅛	15⅝	RochG	1.60	8.5	8	209	17⅝	17⅜	17⅝	+ ⅛
60	44⅛	RochTl	2.84	4.9	16	79	58⅛	57½	57½	−1
20⅝	18½	RckCtr	1.84	9.6	15	187	19⅛	18⅞	19⅛	
28½	17⅞	Rockwl	.72	3.3	7	2925	22	21⅝	22	+ ⅜
9⅝	5½	RodRen				17	3⅞	3⅞	3⅞	− ⅜
37½	29⅛	RohHaas	1.12	3.4	10	1096	34⅝	32⅝	33	− ⅞
37⅞	22⅛	Rohr			16	1577	35⅛	34⅛	34⅛	− ⅞
16⅛	9	RollinE s	.08	.7	25	1092	11⅞	11½	11⅛	+ ⅛
19⅛	14⅛	Rollins	.52	2.9	17	551	18⅛	17⅞	18⅛	+ ⅛
46¼	27⅞	Rorer	.80	2.1	28	681	30⅛	38⅞	38	
6⅝	4½	Rowan				2902	6⅝	6⅛	6½	
62⅝	52⅛	RoylD	a3.62e	5.9	8	4603	31⅞	61⅛	61⅞	+ ⅛
16⅝	6⅞	RoyInt	.20a	1.4	17	425	14⅞	14⅛	14⅝	+ ⅛
3⅞	7⅞	Royce	.51e	6.0		113	8⅝	8½	8½	
28⅛	28	Rubmd	.44	1.7	28	498	25⅞	25⅛	25⅞	+ ⅛
28½	17⅛	RussBr	.40	2.2	18	98	18½	18⅛	18⅜	
16⅞	12⅞	RussTg	.60	4.4	28	40	13⅞	13⅝	13⅝	− ⅛
21½	14	Russell	.28	1.4	15	148	21	20⅝	20⅝	− ⅜
38½	22⅛	Ryder	.60	2.2	17	2963	27⅛	26⅞	26⅞	+ ⅜
27⅛	16⅛	Rykoff s	.60	2.2	14	343	24⅞	24	24	− ⅞
28½	13⅞	Ryland	.60	2.7	7	178	22	21⅜	22	+ ⅜
13⅛	8⅛	Rymer				84	12⅛	11⅞	12	− ⅛
13	7⅞	Rymer pf	1.17	12.		63	9⅞	9½	9⅝	+ ⅛
		−S−S−S−								
34½	30	SCEcp	2.48	7.6	16	1586	22⅛	21⅞	31⅞	− ⅛
9½	6½	SCOR U	.10e	1.2	6	117	8⅝	8⅛	8⅛	
9⅝	7⅞	SL Ind	.17b	2.1		26	8⅛	8	8	− ⅛
61½	28⅝	SPSTec	1.20	2.4	24	x22	50⅞	50½	50⅛	+ ⅜
44⅝	30⅛	SPX Cp	1.20a	2.9	11	1486	41⅛	40⅛	41	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. [illegible]

AMEX COMPOSITE PRICES

4pm prices March 13

Stock	Div.	P/E	Sls 100s	High	Low	Close	Chng
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OVER-THE-COUNTER

Nasdaq national market, 3pm prices March 13

Stock	Div.	Sales 100s	High	Low	Last	Chng
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

FINANCIAL TIMES

Tuesday March 14 1989

AMERICA

Programme buying pushes equities higher

Wall Street

PROGRAMME buying related to stock index arbitrage between the cash and futures market yesterday pushed the equity market sharply higher although the rally came in only moderate volume, *writes Janet Bush in New York.*

The Dow Jones Industrial Average closed 24.11 points higher at 2,306.25 in only moderate volume of 141m shares. The Standard & Poor's 500 index was up 2.44 points at 292.33.

The sharp rise to above 2,300 on the Dow confounded expectations of an uneventful session as traders took a cautious stance ahead of a batch of key economic figures this week. The last time the index closed above 2,300 was on February 21.

The buying came against a background of virtually unchanged US Treasury bonds which traded quietly after Friday's sharp falls on unexpectedly strong employment data. The dollar was marginally higher but there was no dramatic rally to explain the movement in the equity market yesterday morning.

Yesterday's rally appeared to be almost exclusively related to buying of stocks in the S&P 500 as the cash index went to a deep discount to S&P 500 futures contracts. There appeared to have been some short-covering in the futures market which triggered buying of cash stocks.

Equity analysts had expected some volatility in the futures market this week because of Friday's "triple witching hour" when March stock index futures and index options as well as options on individual stocks all expire simultaneously.

Many traders get themselves into position for these expirations in advance, accounting for increased volatility in the days running np to triple witching hour.

The low volume in the cash market yesterday morning suggested that many participants kept out of the way as the waves of programme trades worked their way through the market.

There was little news of any kind yesterday to account for the sharp movement in the equity market. This week sees the release of February retail sales, indnstrial prodnction, capacity utilisation and producer prices data as well as January trade figures and business inventories.

Given increased worries about inflation ignited by last Friday's employment figures, the PPI on Friday is likely to receive intense attention. Producer prices are forecast to hava risen by about 0.3 per cent to 0.4 per cent after the surprisingly strong 1.1 per cent rise in January.

Among featured stocks yesterday was Shaklee which jumped $9¾ to $47⅝ on news that the company has agreed definitively to merge with Yamanouchi Pharmaceutical of Japan in a deal worth $48 a share made up of $28 a share in cash and $20 in a special dividend.

Boeing rose $⅞ to $66⅞. The company has revised its forecast for sales sharply higher over the next 15 years. It predicts purchases over that period worth $516bn compared with its previous forecast of $414bn.

Two companies were asked by tha New York Stock Exchange to explain unusual trading in their stock. General Housewares rose $1⅝ to $13⅝, adding to its sharp gains on Friday on takeover speculation, and Barry Wright declined comment on the heavy volume of trading in its shares, three times the average.blits stock rose $⅝ to $5⅝.

Dun & Bradstreet fell $⅞ to $48⅞ after the company said that sales growth in its credit services division had slowed down in recent months, due in part to controversy over the group's way of dealing with its customers.

Canada

STOCK prices ended mixed in Toronto after an extremely quiet session characterised by concern about where Canadian interest rates are heading. But energy stocks managed to record moderate gains, reflecting a sharp rise in oil prices.

The composite index rose 5.8 points to 3,637.1, but declining issues led advances by a 344 to 298 margin. Volume was a very light 15m shares.

EUROPE

Transatlantic influences remain paramount

A STRONG start on Wall Street was responsible for late firmness in European trading, amid relief at the limited impact of Friday's US jobs figures, *writes Our Markets Staff.*

FRANKFURT ended only marginally lower in a muted reaction to the defeat of the ruling CDU party in the city elections at the weekend. Some analysts had expected a sharper setback, given the likelihood of a Social Democrat-Green coalition running Frankfurt and the advance of the far right in the poll.

The absence of a steep fall was attributed to the market's weakness last week, which suggested that a bad result for Chancellor Kohl's party was already contained in prices. But thin volume of DM2.2bn also made it hard to determine a clear direction for the market.

Tha FAZ index eased 0.96 to 552.28 at midsession and the DAX index finished 4.96 weaker at 1,313.55. At its worst, the market had been down less than 1 per cent, and prices picked up further after hours.

"It's still more the interest rates that are making the market a little bit nervous," said one analyst, pointing to the fact that prices moved higher on Wall Street's early strength.

Investors were watching New York keenly for signs of a further setback after Friday's surge in US employment and sharp decline in joblessness.

Daimler shed DM5.50 to DM667.50, in line with the market, after an initially negative reaction from the federal cartel office to the motor group's plans to take over MBB, the aerospace company.

Construction stock Holzmann, which had been expected to suffer from a shift to the SPD in Frankfurt because of fears for its property projects there, in fact gained DM4 to DM658. But Hochtief, which holds 20 per cent of Holzmann, was down DM8.70 at DM714.

PARIS had Wall Street to thank for its firmer finish as an unexpectedly strong opening in New York pulled prices back into the black after a generally weak session.

The market finished at the day's highs, with the OMF 50 index up 0.27 at 452.60 and the CAC 40 index 2.47 higher at 1,604.85. Volume was again weak.

Paribas managed to recoup a FFr4 loss to finish unchanged on the day at FFr456 after subsidiary Crédit du Nord came out with better than expected results, turning 1987's FFr158m loss into a profit of FFr59m last year. One analyst said the good news should feed through into Paribas' results.

Michelin was meanwhile knocked by speculation that higher than expected provision levels would eat into its earnings. It fell FFr5.50, or 2.8 per cent, to FFr189.50.

Générale des Eaux lost FFr14 to FFr1,565 amid rumours of a one-for-seven rights issue, with warrants attached, worth FFr3bn. Institut Mérieux fell FFr60 to FFr6,390, announcing an agreement with Connaught BioSciences of Canada to merge their worldwide human health businesses.

MADRID had a surprisingly strong session, apparently shaking off worries over interest rates, and anded with a gain of almost 1 per cent.

The general index rose 2.52 to 278.68 and volumes were estimated at Friday's improved levels, over Pta 10bn in value. February's inflation figures are due out later this week and expectations are for a rise of 0.3 per cent.

The construction/building sector was particularly firm, with Asland adding another 75 points to 1,190 of par, a rise of 6.7 per cent. Valenciana de Cementos jumped 165 to 3,915 and Focsa added 80 to 1,645.

In banks, Banesto put on 15 to 963 and Central rose 20 to 1,005. According to James Capel, Banesto has advised its main subsidiaries to buy shares in the bank. Acerinox was rumoured to have bought a large block last week and Union et Fenix is expected to buy shares in the short term.

AMSTERDAM had another quiet day, with only Fl 464m worth of shares traded, but prices were boosted after a nervous start by takeover activity, a firmer dollar and a stronger Wall Street opening. The CBS tendency index ended 0.5 better at 167.7.

Ahrend, the office equipment and furniture maker, surged Fl 23, or 13 per cent, to Fl 245 after news of Bührmann-Tetteroda's 30 per cent stake. Bührmann is considering a full bid. Although hostile takeovers are rare in the Netherlands, the market now has two to keep it entertained, with the current battle in the construction sector between HBG, up Fl 2 yesterday at Fl 176, and its target Volker Stevin, off Fl 4 at Fl 61.50.

Other shares were lifted by the Ahrend news, with NPM, which has a stake in Ahrend, rising Fl 1 to Fl 33.80, and office equipment company Samas adding Fl 3.10 to Fl 66.60.

Another strong performer was Philips, up Fl 1.10 at Fl 38.10 on short-covering.

ZURICH had little to offer in the way of excitement as interest rate worries continued to prove a nuisance. Investors are on hold for tomorrow's release of the US trade figures. The Crédit Suisse index lost 1.9 to 553.3.

HELSINKI was led to another record high by strong bank stocks and the Unitas all-share index rose 5.2 to 791.5.

STOCKHOLM ended little changed in the absence of market-moving news, with the Affärsvärlden index off 0.3 at 1,115.5. Nobel Industrier free B shares fell 8 to 245 after reporting a 50 per cent rise in annual profits.

BRUSSELS was kept alive by active trading in oil group Petrofina. The cash market index added just 4.37 to 5,693.47, amid continuing concern over inflation.

Petrofina rose BFr50 to BFr13,050 with 23,650 shares traded, after falling last week on news of an agreement between main shareholders Société Générale and GBL.

MILAN remained devoid of news and thin on activity, with volume estimated at a low L90bn. The Comit index fell 4.61 to 577.90.

ASIA PACIFIC

Bargain-hunting trims fall as trading level plummets

Tokyo

INVESTORS shied away from the Japanese market as more negative news emerged and shares fell in very thin trading, *writes Michiyo Nakamoto in Tokyo.*

Activity was sluggish from the start and the Nikkei average slipped throughout the day, losing more than 274 points at its worst to reach a low of 31,427.00. Some bargain-hunters moved in at these substantially lower prices and the Nikkei average recovered to close the day down 148.82 at 31,552.96. Its high was 31,693.51.

Declines far ontnumbered gains by 584 to 292 while 194 issues were unchanged. Volume at 564m shares was much lower than the 915m traded on Friday. The Topix index of all listed shares dropped 15.35 to 2,392.89 but in later trading in London the ISE/Nikkei 50 index rose 2.08 to 1,887.04.

The announcement on Friday that the US unemployment rate in February reached 5.1 per cent – its lowest for nearly 15 years – rekindled fears of higher interest rates. The unemployment figures led to a weakening of the yen against the dollar and a plunge in bond prices which further hurt market sentiment.

Institutional investors were also reluctant to commit themselves, as the year-end results for a large number of *tokkin*, or special trust funds, are to be *announced on March 20.*

On the domestic front, it was reported that support for Prime Minister Noboru Takeshita fell to an all-time low of 13.1 per cent, reflecting the damaging impact of the Recruit affair. The feeling is spreading that the market is undergoing a necessary correction, but analysts remain confident of a rally in the spring, supported by funds that will become available throngh massive redemptions of government bonds. The consensus, however, is that institutional investors will not be participating for some time, *at least* until after the *tokkin* results are announced.

The list of the 10 most actively traded issues reflected a widely mixed array of selected stocks. Trading yesterday followed the pattern of buying special situations in an uncertain market environment.

Mitsui Mining and Smelting rose to the top of the most actives list with 29.7m shares, and gained Y15 to Y960. The company attracted interest for a factory site it owns in an area that is a prime candidate as a test site for a linear motor car line. Linear motor cars are Japan's next generation high-speed trains which run on magnetic levitation with the use of superconductivity. They are faster than bullet trains and could reduce the trip from Tokyo to Osaka to one hour from the present three. The Government will decide by the spring where the test site will be located.

Mitsui Engineering and Shipbuilding was the second most actively traded issne with 28.1m shares, rising Y7 to Y864. It has been attracting sporadic interest in its move into businesses such as new materials.

Sanyo Special Steel was third on the volumes list with 20.5m shares and rose Y90 to Y1,200. The company is snpported by a brisk steel product market and is also moving into the linear motor-car business. Some brokers, however, suspected that Sanyo Special Steel was bought to add to the profits of some underperforming *tokkin* trusts ahead of the year-end.

Laggards attracted interest in Osaka but the OSE average closed down 78.31 at 29,821.61. Volume at 79m was a hefty drop from the 127m traded on Friday.

Roundup

THERE was no clear trend to trading in Asia Pacific markets, which took their direction from local events or non-events rather than from New York and Tokyo.

AUSTRALIA barely heard a squeak as trading ground to a virtual halt thanks to a public holiday in Melbourne and nervousness about the balance of payments figures for February, due on Thursday.

The All Ordinaries index ended just 2 higher at 1,490.8 in turnover of 36m shares worth A$66m, the lowest since the Labour Day holiday in New South Wales on October 3.

Transporter TNT shed 2 cents to A$3.12 after a Supreme Court judge dismissed its challenge to Normandy Resources' takeover of Poseidon. Normandy put on 2 cents to A$1.47.

In the retail sector, David Jones gained 30 cents to A$10 on positive interim results, while Coles Myer rose 10 cents to A$8.04 before its figures tomorrow.

HONG KONG fell further as speculation about capital increases and higher interest rates took hold in the absence of hard news. The Hang Seng index shed 16.92 to 3,029.89 in turnover of HK$1.41bn, little changad from Friday's HK$1.39bn.

Hongkong Bank was off 10 cents at HK$7.20 before its results today. Cheung Kong was the most active stock, easing 5 cents to HK$9.95.

SINGAPORE managed further gains on bargain-hunting, in spite of Wall Street's weaker close on Friday and a sharply lower figure for January trade growth. The Straits Times industrial index added 5.52 to 1,160.38 in volume similar to Friday's at 51m shares.

Speculation about the price being offered for the Standard Chartered building in Singapore focused interest on property stocks, with Singapore Land up 30 cents at S$9.50 and City Development rising 16 cents to S$3.72.

SEOUL climbed sharply for the fourth consecutive session, with the composite index gaining 8.78 to a record high of 971.94. Most of the gains took place in the morning, and the market drifted during the rest of the session.

TAIWAN experienced its most active session this year, with the weighted index rising 157.54 to 7,628.91. The advance was fuelled by active buying in three leading commercial banks which make up 20 per cent of the markets' capitalisation.

SOUTH AFRICA

GOLD shares closed mixed in directionless trading as operators paused after last week's surge. A steady bullion price and a slight rally in the financial rand had little impact.

In golds, Randfontein shed R3 to R235 and Beatrix 90 cents to R13.50.

Recruit scandal drains confidence

MARKETS IN PERSPECTIVE

	% change in sterling †			
	1 Week	4 Weeks	1 Year	Start of '89
Austria	+0.50	+7.87	+21.12	+11.97
Belgium	-1.00	-1.19	+3.83	+2.00
Denmark	+0.65	+2.86	+48.29	+12.70
Finland	-1.65	-2.17	+24.91	+13.31
France	-0.77	-2.32	+44.40	+4.73
West Germany	-1.11	+0.03	+15.41	+1.18
Ireland	-0.50	+5.26	+27.81	+13.65
Italy	-1.49	+1.58	+10.86	-2.25
Netherlands	+1.76	+3.46	+16.33	+7.96
Norway	-0.38	+9.77	+56.05	+29.77
Spain	+1.56	+1.51	+7.90	+3.62
Sweden	+1.90	+5.15	+40.75	+13.86
Switzerland	+0.90	+2.21	-3.46	+3.33
UK	+1.29	+1.45	+16.24	+18.56
EUROPE	+0.45	+0.97	+17.15	+9.17
Australia	0.00	-7.09	+35.51	+0.71
Hong Kong	-0.26	-1.45	+37.23	+20.59
Japan	-2.48	-2.05	+24.39	+3.42
Malaysia	+0.95	-0.30	+43.51	+14.30
New Zealand	+0.94	-3.08	+0.99	+12.42
Singapore	+1.83	+1.25	+38.55	+19.88
Canada	+1.66	+2.86	+20.24	+13.12
USA	+1.02	+2.32	+19.32	+11.14
Mexico	+5.41	+1.67	+14.69	+6.08
South Africa	+5.78	+8.65	+8.37	+23.12
WORLD INDEX	-0.64	+0.03	+21.22	+7.29

†Based on March 10, 1989

By Alison Maitland

THE CURRENT malaise of the Japanese market continued to dominate the world equities scene last week, as a fall of 2.5 per cent in sterling terms compounded the 1.6 per cent loss of the previous week.

The painful unfolding of the Recruit Cosmos share sale scandal – with arrests last week of the former chairman of Nippon Telegraph and Telephone and a former depnty labour minister – was principally to blame for the market's weakness.

The week was not entirely without redemption. On Tuesday the market ended higher after investors became convinced the bad news was all contained in prices and that positive fundamentals and high liquidity would win the day. But confidence soon ebbed as concern about the impact of the Recruit affair on the ruling LDP party was exacerbated by fresh worries about interest rates and a lack of institutional interest as the end of the financial year approaches.

Japan's sorry state helped to send the World Index into the red last week, with a 0.64 per cent fall, in spite of healthy gains in other leading markets such as the US, up 1 per cent, and the UK, 1.3 per cent better.

Mexico and Sonth Africa stood out with rises of more than 5 per cent. The Mexican market advanced in anticipation of positive news on the debt question, according to Ms Jane Hakham, international investment manager for Gartmore's Frontier Markets Trust.

The debt plan unveiled by Mr Nicholas Brady, US Treasury Secretary, on Friday was welcomed by the Mexican Finance Minister at the weekend as "particularly positive" for emphasising debt reduction *rather than additional* indebtedness.

South Africa steamed ahead as industrial shares were boosted by better corporate fundamentals and a shortage of scrip and the golds rose on a firmer bullion price.

Europe had an uninspiring week. Scandinavian markets showed the biggest moves, with Sweden the top performer and Finland taking up the rear.

FT-ACTUARIES WORLD INDICES

Jnintly compiled by The Financial Times Limited, Goldman, Sachs & Co., and County NatWest/Wnod Mackenzie in cnnjunctinn with the Institute of Actuaries and the Faculty of Actuaries

NATIONAL AND REGIONAL MARKETS	MONDAY MARCH 13 1989					FRIDAY MARCH 10 1989			DOLLAR INDEX		
Figures in parentheses show number of stocks per grouping	US Dollar Index	Day's Change %	Pound Sterling Index	Local Currency Index	Gross Div. Yield	US Dollar Index	Pound Sterling Index	Local Currency Index	1988/89 High	1988/89 Low	Year ago (approx)
Australia (89)	138.18	+0.1	119.63	111.80	4.90	137.99	119.26	111.56	157.12	91.16	110.73
Austria (18)	102.64	+0.8	88.86	99.49	2.53	101.88	88.04	98.66	103.18	83.72	90.68
Belgium (63)	131.10	+0.3	113.50	126.74	4.09	130.67	112.93	126.32	139.89	99.14	135.24
Canada (125)	135.12	+0.3	116.98	117.27	3.27	134.68	116.39	116.78	137.27	107.06	120.45
Denmark (39)	166.64	−0.5	144.27	164.94	1.87	167.42	144.69	165.31	180.38	111.42	121.50
Finland (26)	143.37	+1.9	124.12	130.76	1.40	140.64	121.54	128.18	147.07	106.78	121.41
France (130)	114.14	−0.1	98.81	113.24	2.87	114.25	98.74	113.22	119.98	72.77	85.53
West Germany (102)	83.59	−0.9	72.37	81.14	2.33	84.39	72.93	81.71	90.40	67.78	78.83
Hong Kong (44)	127.03	−0.7	109.97	127.22	3.78	127.86	110.50	128.06	133.77	84.90	100.54
Ireland (17)	141.56	−0.3	122.56	139.34	3.69	142.03	122.74	139.65	146.46	104.60	120.77
Italy (98)	78.16	−1.0	67.67	79.91	2.53	78.91	68.20	80.56	86.88	62.99	76.63
Japan (456)	186.02	−1.0	161.05	152.69	0.49	187.82	162.32	153.69	200.11	133.61	162.31
Malaysia (36)	155.86	+0.2	134.94	165.26	2.70	155.55	134.43	164.69	159.79	107.83	118.28
Mexico (13)	166.23	+2.1	143.92	429.75	1.19	162.81	140.70	421.16	182.24	90.07	155.93
Netherland (39)	115.43	+0.3	99.93	111.00	4.55	115.07	99.45	110.37	116.50	95.23	107.16
New Zealand (24)	71.06	−1.4	61.52	61.33	6.31	72.07	62.28	61.93	84.05	63.32	76.89
Norway (26)	168.77	−1.3	146.11	155.66	1.83	170.98	147.76	157.34	174.29	98.55	117.22
Singapore (26)	144.06	+1.3	124.72	128.66	2.09	142.22	122.91	127.22	144.06	97.32	112.65
South Africa (60)	138.59	+1.6	119.98	121.18	4.15	136.42	117.90	121.72	139.07	98.26	137.73
Spain (42)	146.95	+0.8	127.22	129.25	3.73	145.79	126.00	128.06	164.47	130.73	146.01
Sweden (35)	155.35	−0.5	134.50	146.96	2.25	156.13	134.94	147.24	156.90	96.92	119.26
Switzerland (57)	76.04	−0.6	65.83	75.26	2.31	76.51	66.12	75.51	86.75	74.13	85.76
United Kingdom (314)	150.44	+0.6	130.24	130.24	4.23	149.56	129.26	129.26	152.54	120.66	139.57
USA (568)	120.24	+0.8	104.10	120.24	3.61	119.29	103.09	119.29	121.90	99.19	108.58
Europe (1006)	118.73	+0.1	102.79	109.55	3.52	118.63	102.52	109.26	120.88	97.01	109.56
Nordic (126)	147.09	−0.3	127.34	144.80	1.99	147.54	127.50	144.88	149.38	95.22	111.25
Pacific Basin (675)	181.57	−0.9	157.19	149.70	0.70	183.24	158.37	150.63	194.72	130.81	157.85
Euro-Pacific (1681)	156.45	−0.6	135.45	133.64	1.57	157.41	136.04	134.11	164.22	120.36	138.55
North America (693)	121.03	+0.8	104.78	120.09	3.59	120.10	103.90	119.17	122.71	99.78	109.22
Europe Ex. UK (692)	99.24	−0.3	85.91	96.68	2.91	99.58	86.06	96.83	103.11	80.28	90.96
Pacific Ex. Japan (219)	128.23	−0.1	111.02	112.03	4.37	128.40	110.97	112.11	137.65	87.51	104.05
World Ex. US (1879)	155.54	−0.6	134.66	133.10	1.64	156.41	135.18	133.54	162.77	120.26	137.94
World Ex. UK (2133)	141.01	−0.2	122.08	128.56	2.04	141.32	122.14	128.64	146.04	111.77	125.33
World Ex. So. Af. (2387)	141.86	−0.2	122.81	128.76	2.24	142.08	122.79	128.74	146.65	113.26	126.51
World Ex. Japan (1991)	120.69	+0.5	104.49	116.37	3.60	120.10	103.80	115.75	122.37	100.00	109.46
The World Index (2447)	141.84	−0.1	122.79	128.71	2.25	142.04	122.76	128.68	146.51	113.37	126.58

Base values: Dec 31, 1986 = 100; Finland: Dec 31, 1987 = 115.037 (US $ Index), 90.791 (Pound Sterling) and 94.94 (Local); Nordic: Dec 30, 1988 = 139.65 (US $ Index), 114.45 (Pound Sterling) and 123.22 (Local).